FACTORS ASSOCIATED WITH SUCCESS OF RETURNING COLLEGE DROPOUTS

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CHAPTER I

INTRODUCTION

Thousands of young people enter America's colleges each fall with great hopes for success. Before the end of the first school year, an estimated 40 percent of these students have become "dropouts."

It is commonly assumed by many, even some college officials, that college dropouts are the "deadwood," the "ne'er-do-wells" of college student bodies, and that their departure from the college scene is to be applauded as a gain to the college, even if a loss to the student. This feeling is not shared by all college officials, and many are attempting to arrive at methods of identifying characteristics of formerly unsuccessful students which can be used to predict with some accuracy the relative degree of success such students would achieve were they readmitted to college. This attempt is based on the conviction that there are many factors contributing to success or failure in academic work.

Factors which pertain to academic success may be classified as academic, societal, personality, financial, and parental. Naturally, as in any attempt at classification, there is considerable overlap in these groups of factors. For example, the parental factors affecting academic achievement may very well embrace financial problems and have great impact on the student's personality. It is also apparent that these classifications could be subdivided further: academic factors could include previous academic achievement, "native" intelligence, matching of abilities and interests with educational objectives, and interpretations of various test data which purport to measure certain "academic" characteristics.

There have been numerous studies on college dropouts. In Chapter II, an attempt will be made to review the research in this area in order to provide a frame of reference for the present study. This will reveal the apparent disproportionate emphasis on "reasons" for termination of college attendance.

If the retention of students who are able to succeed is a major objective of our college-level institutions, then it is essential in research on dropouts to discover ways to identify potentially successful students and methods to assist them in attaining success. An attempt will be made in Chapter VI to draw implications for student services, but the major benefit anticipated from this study will be an approach to the identification of potentially successful students who have been unsuccessful in their first attempts at college work.

THE PROBLEM

Statement of the problem. The purpose of this study is to identify and evaluate certain factors associated with success which could be utilized in a university program for the readmission of formerly unsuccessful students. The emphasis in this study is upon those factors which could be utilized to predict success of a readmitted student who was formerly unsuccessful.

Several possible results, and potential benefits, accruing from this study are as follows:

1. Factors contributory to college success, in general. The study concerns some factors contributing to college success which have not been recognized generally in previous studies on dropouts or college students as a whole.

2. Early identification of potential dropouts. Because of the rich supply of data available for this study, a group of factors were isolated which could be utilized to identify potential dropouts, thus providing University personnel with information which could be used to help students avoid failure.

3. Special factors contributory to success of former dropouts. Certain factors, peculiar to dropouts, were identified and evaluated with respect to later success in university work. This class of factors should be especially valuable to administrators responsible for the readmissions program.

4. Specific value to the University of Florida. Because of the specific value of research to a sponsoring institution, it is hoped that this study of University of Florida students will have practical application to the admissions and counseling programs of the University.

Basic Assumptions and Definitions

There are several assumptions underlying this study. In the first place, it is assumed that a college education is desirable. It is also assumed that a student is "successful" if he maintains a "C" average, or higher, in all college work attempted and/or if he graduates from college with a baccalaureate degree.

Definitions of special note are as follows:

1. Readmit: This term is used to refer to an action by a college to permit a student to reenter the institution after interruption of attendance at the same institution, whether or not the student actually reenters.

2. Student: This term refers both to a person in attendance at the University and to a person who had formerly attended the University, whether eligible for readmission or not.

3. Term: Except where modified by the word "summer," this refers to a standard semester.

4. University: This term, when capitalized, is used specifically to refer to the University of Florida, the institution whose students were the subjects for the study.

5. Unsuccessful: A student was deemed unsuccessful if he had been suspended from the University for any reason or if he had voluntarily withdrawn after a date specified in the Catalog as the "...last time for dropping courses without receiving a grade of 'E'." A returning student was considered unsuccessful if he failed to maintain a "C" average, or higher, during his work following readmission.

General Design of the Study

As initially planned, this study was to focus on the identifiable factors which relate to the success of a group of returning college dropouts. The population to be studied consisted of all regularly admitted and registered students who both (1) enrolled for their first college-level work as freshmen at the University of Florida in the autumn of 1959 or 1960, and (2) either were suspended (for any reason) from the University within the first calendar year follow-initial registration, or voluntarily withdrew (after the last date for dropping courses without receiving failing grades) within the first year. Thus, the population consisted only of students who were unsuccessful during their freshman year at the University of Florida. No "special students" were included.

The classes entering in 1959 and in 1960 were selected for two reasons:

1. Results from the Minnesota Multiphasic Personality Inventory (MMPI) were not available for classes entering before September, 1959;
2. Classes entering later than 1960 had not yet had sufficient time to enable initially unsuccessful students to graduate from college in any significant numbers.

In Chapter III the detailed procedure for data collection is described. The original plan for collecting data was less detailed than the procedure which ultimately became necessary. The writer discovered after beginning the research that some sources of data which had appeared to be available were actually inaccessible. For example, the results of various standardized tests had been expected to be in punched-card form and available for immediate use. However, much of the punched-card test data had been discarded shortly before this study was undertaken.

As the records of students were reviewed in the offices which are usually considered to be the central records offices (the offices of the Registrar and the Dean of Student Affairs), the writer began to realize that there were several other data sources on the University campus which had not been considered in the initial plan. This discovery and the resulting modification of the data collection procedure account for a study of a somewhat different character than had originally been contemplated.

As originally planned, this research was expected to provide answers to numerous questions of specific nature concerning the group of returning dropouts, the dropouts who did not return, and the total freshman classes from which the dropouts were selected. While some specific answers were obtained, the present study is not primarily an answer-giving report. This study should probably be viewed as exploratory in nature, giving rise to speculation and direction for further research in the general area of retrieval of dropouts for later success.

CHAPTER II

RELATED LITERATURE

A sampling of the literature in the fields of prediction of college success, research on college dropouts, and research on reentering college dropouts will be discussed in this chapter.

Prediction of College Success

Colleges and universities are constantly faced with the necessity of selecting students who will exhibit, or possess, those qualities which will probably lead to academic success. This responsibility has resulted in the establishment of admissions committees, admissions offices, and, in many cases, elaborate systems of admissions procedures. These provisions are predicated upon the concept that higher education should maintain certain standards of excellence and that only those students who can meet these standards should be selected for admission.

Concern for the intellectual development of students adds another dimension to the selection process. The retention of students in college, the fostering of motivation to learn through success, and the desire to extend higher educational opportunities to a larger number of students make the problem of student selection, or admission, even more complicated.

Because of all these reasons, some reliable indices are needed for predicting success in college. The research which has dealt with predictive factors has yielded results which are gradually reducing the element of chance within the selection process and providing a more scientific basis for admission.

In the 1964 study entitled "Research Related to College Persistence," Constance Waller cautioned that, "While general [national] studies are helpful, each institution should make individual studies to see what specific factors are most meaningful for the particular institution."[1]

The admission policies and procedures of a college or university should be based upon the most accurate and most humanistic measures available. For "...it is undesirable for a college to admit a student who is known to have no chance to succeed in college. This is wasteful, basically dishonest, produces bad public relations and often has disastrous psychological effects on the student involved."[2]

Committees on policies should carefully and frequently evaluate the limits which they place upon admission and readmission of students.

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1. Constance Waller, "Research Related to College Persistence," College and University, XXXIX (Spring, 1964), 282.

2. Ibid.

Adkins pointed out the need for periodic reexamination of predictive factors, in view of their tendency to shift in relative importance.[3] Moreover, to accept only quantitative measures for prediction may exclude a student whose maturity and aspirations give him sufficient motivation to succeed in college, in spite of inadequate performance on quantitative determinants.[4] This is especially true of older students. Recognition should also be given to the distinctive parameters of male and female students. As numerous studies have shown, men and women tend to score much differently on some tests and also tend to drop out of college for differing reasons. Alexander and Woodruff have pointed "...to the desirability of elasticity of policy and to the need for a high degree of individualization of academic and social program...."[5] Such flexibility in policy should allow for qualitative judgments based on such factors as motivation, level of aspirations, and finances, and for recognition of age and sex differences and of the relative instability of predictive factors.

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3. Arlie A. Adkins, "Prediction of College Success at Middle Tennessee State College." (Doctoral dissertation, College of Education, University of Florida, 1963), 101.

4. Horace W. Sturgis, "Trends and Problems in College Admissions," College and University, XXVIII (Oct., 1952), 15.

5. Norman Alexander and Ruth J. Woodruff, "Determinants of College Success," Journal of Higher Education, XI (Dec., 1940), 484.

Research in the area of college success has received considerable attention, partly because there has been a real need for development of more reliable predictors. In general, researchers have concentrated on prediction of freshman achievement, rather than achievement for the full four years of college. There is some justification for this practice since students tend to perform in their total career according to their freshman achievement. For example, Scates, in a study of University of Chicago students found a correlation of .84 between freshman grades and grades representing the four-year records of the same students.[6]

Studies to date have shown that the best single predictor of college success is the high-school grade-point average. Cosand, in 1953, found that colleges rely most heavily on grades, high-school rank, and other indicators of success in high school to predict success in college.[7] Cosand reported that the high-school average was found to correlate positively with college average, such correlations ranging from 0.50 to 0.65 in various studies. He concluded that this

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6. Douglas E. Scates, "Selective Admission and Selective Retention of College Students at the University of Chicago." (Doctoral dissertation, The University of Chicago, Chicago, Ill., 1926), 225.

7. Joseph P. Cosand, Jr., "Admissions Criteria: A Review of the Literature," California Journal of Secondary Education, XXVIII (Jan., 1953), 12-21.

relatively high range of correlations causes high-school average to be the best single predictor of college success.

Constance Waller's study of research related to college persistence showed that the high-school grade-point average (commonly referred to as GPA) correlates with college GPA at a high level, ranging from +.56 to +.80, depending on the particular study concerned.[8] A similar study conducted in 1949 displayed a range of correlations from +.29 to +.83.[9] Scates, in his 1926 study of University of Chicago students found a correlation of .56 between high-school average and freshman achievement. The correlation was even higher (.61) when only students from the Chicago city schools were considered.[10] Adkins compared twelve variables at Middle Tennessee State College, finding that the best individual grade predictor was high-school GPA, with correlations of .53 (for men) and .66 (for women).[11] This relatively high range of correlations indicates that high-school average is the best single predictor of college success, generally.

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[8] Waller, op. cit., p. 284.

[9] Harley F. Garrett, "A Review and Interpretation of Investigations of Factors Related to Scholastic Success in Colleges of Arts and Sciences and Teachers Colleges," Journal of Experimental Education, XVIII (Dec., 1949), 91-138.

[10] Scates, op. cit., p. 28.

[11] Adkins, loc. cit.

Cosand pointed out that rank in class, another measure of high-school achievement, correlated with college average from .50 to .60.[12] Hoffman found correlations of .544 (for men) and .412 (for women) between high-school rank and achievement during the freshman and sophomore years at the University of Florida.[13]

Ficken's study of Macalester College students revealed that the high-school GPA was as good a predictor of achievement in the liberal arts college as the Minnesota College Ability Test.[14] Henderson and Masten, in a study of the 1955 freshman class at Hofstra College, used six predictors of college achievement (five tests and high-school GPA), concluding that the high-school GPA and one of the tests (the Regents Examination) were about as good as all six predictors combined.[15] Pierson, in his study at Portland State College, and Zuckowsky, in a study of lower-division students at the University of Notre Dame, agree that the high-school GPA served as a better predictor

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12. Cosand, *loc*. *cit*.

13. Charles A. Hoffman, "A Study in Predicting Academic Success." (Doctoral dissertation, College of Education, University of Florida, 1958), 129.

14. C. E. Ficken, "Predicting Achievement in the Liberal Arts College," *School and Society*, XLII (Oct., 1935), 518-20.

15. Harold L. Henderson and Sherman H. Masten, "Six Predictors of College Achievement," *Journal of Genetic Psychology*, XCIV (Mar., 1959), 143-46.

than certain standardized tests. The American Council on Education Psychological Examination (ACE) and the Ohio State University Psychological Examination were the tests involved in Pierson's study.[16] Zuckowsky utilized the ACE and the School and College Ability Test (SCAT).[17]

Although most of the researchers agree that the high-school GPA can be used as a fairly accurate predictor of academic success in college, a significant number of studies indicate that far better predictions can be made when this measure is used in combination with other measures. As a result of Schmitz's study at St. Benedict College, the "...use of several predictions, to be safe," was urged.[18] Long's study at the College of William and Mary revealed that the best combination of predictors was the high-school GPA and the verbal part of the SCAT: $[\,Ry\ (x_1,x_2)= .66\,]$.[19] Holland's study lends support to this position.[20] Frederick Markwardt found in his study of 400 women enrolled in Early Childhood and Elementary Education programs at the University of Minnesota that rank in high-school graduating class was a most efficient single predictive variable, but patterns of several factors were even more effective. He identified five separate clusters of predictors that would be improvements over the high-school rank taken alone. These five, in descending order of efficiency, are as follows: (1) high-school rank, ACE, and Scale 7 of the Minnesota Multiphasic Personality Inventory (MMPI); (2) high-school rank, the Cooperative English Test, and Scale 7 of the MMPI; (3) high-school rank, Minnesota Teacher Attitude Inventory (MTAI), and Scale 7 of the MMPI; (4) high-school rank, MTAI, and Scales 7 and 8 of the MMPI; and (5) high-school rank, the Cooperative English Test, the MTAI, and Scale 7 of the MMPI.[21]

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[16] Rowland R. Pierson, "Age v. Academic Success in College Students," School and Society, LXVIII (Aug. 7, 1948), 94-5.

[17] Leo M. Zuckowsky, "The Efficiency of SCAT and Other Selected Variables in Predicting Success in the Various Lower-Division College Curricula," Dissertation Abstracts, XII (Jan. 1962), 2297.

[18] Sylvester B. Schmitz,"Predicting Success in College: A Study of Various Criteria," Journal of Educational Psychology, XXVIII (Sept. 1937), 473.

[19] John M. Long, "The Prediction of College Success from a Battery of Tests and from High School Achievement," Dissertation Abstracts, XXI (Nov. 1960), 1100.

As suggested by Markwardt's study, the addition of certain scales of the MMPI seems to improve the prediction of academic success when used with other factors. Frick pointed out that "...the 12 percent index of forecasting efficiency afforded by the ACE alone was increased to 23 percent by inclusion of certain MMPI scales."[22]

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[20] 20. John L. Holland, "Prediction of Scholastic Success for a High Aptitude Sample," School and Society, LXXXVI (June 21, 1958), 293.

[21] 21. Frederick C. Markwardt, Jr., "Pattern Analysis Techniques in the Prediction of College Success," Dissertation Abstracts, XXI (April, 1961), 2990.

Various other combinations of tests have been studied as possible predictors of academic success in college, and the results have been significant. Cosand found that various combinations of tests and other factors yielded multiple correlations ranging from 0.65 to 0.80.[23] Unfortunately, very little evidence of replication of local studies in different types of colleges and universities can be found. Fleischer's study of Nutley, New Jersey, high school graduates revealed that there was some correlation between high-school average, scores on the Scholastic Aptitude Test of the College Entrance Examination Board (SAT), IQ, and college GPA's. However, only the correlation between high-school GPA and college GPA was significant at the .01 level of confidence.[24] Boyer's study at the Pennsylvania State Teachers College at Millersville showed correlations of .53 between the ACE and college GPA's, .60 between the Ohio State University Psychological Examination and college GPA's, .68 between the ACE, Ohio State, and college GPA's, and .49 between rank in high-school graduating class and college GPA's.[25] Ridley's study at Virginia State College showed a correlation of .50 between the Otis Test of Mental Ability, the Iowa State Tests, and college GPA's.[26]

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[22] J. W. Frick, "Improving the Prediction of Academic Achievement by Use of the MMPI," Journal of Applied Psychology, XXXIX (Jan. 1955), 52.

[23] Cosand, loc. cit.

[24] Robert D. Fleischer, "High School Graduates and College Admittance," NASSP Bulletin, XLV (May. 1961), 96.

The evidence seems to point out a need for study of those predictive factors which will operate best for each college. Until such refinement of predictive elements has been accomplished, it seems that Frick's summary still applies: "For fifty years colleges have found that high school achievement correlates about .55 with college achievement; for thirty-five years tests have correlated about .45; and multiple correlations of the two combined is about .64."[27]

Some of the other factors which seem to contribute to success in college are the size of high schools and the size of the graduating classes from which freshmen come. Lins' study in Wisconsin revealed that students from small high-school graduating classes did not perform as well in college as did those who came from larger classes.[28]

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25. Lee E. Boyer and James E. Koken, "Admissions Test as Criteria for Success in College," Journal of Educational Research, L (Dec. 1956), 313.

26. Walter N. Ridley, "The Prognostic Value of Freshman Tests Used at Virginia State College," Dissertation Abstracts, XIV (July, 1954), 1042.

27. Frick, loc. cit.

28. Leo J. Lins, "Pre-University Background and the Effect of Various Factors Upon University Success," Personnel and Guidance Journal, XXXIII (Nov. 1954), 158.

Bledsoe's study of students from larger high schools corroborates Lins' results.[29] An Indiana study by John F. Young of high schools of various sizes, showed that students from larger high schools tend to be better prepared for college.[30] Kramer's study at Rutgers University agrees with these results.[31]

Other factors which have been studied for their predictive value are high-school recommendations,[32] college climate and socialization,[33] age,[34] eighth-grade test scores,[35] and urban versus rural backgrounds of students.[36] Each of these factors has shown some relationship to college achievement in at least one study. But none of them seems to give very satisfactory answers to the question of what else, besides high-school GPA's and test scores, can predict success in college, singly or in combination with other factors.

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[29] Joseph C. Bledsoe, "An Analysis of the Relationship of Size of High School to Marks Received by Graduates in the First Year of College," Journal of Educational Psychology, XXVII (May. 1954), 418.

[30] John F. Young, "A Comparison of the Academic Preparation and Achievement of College Students from Various Size High Schools in Indiana," Dissertation Abstracts, XIX (Feb. 1959), 1960.

[31] Geo. A. Kramer, "High School Class Rank and Academic Performance of Freshmen in College," Dissertation Abstracts, XX (March, 1960), 3575.

[32] Gail F. Farwell, "A Coordinated Program of Admission and Counseling," Personnel and Guidance Journal, XXXV (Dec. 1956), 239.

[33] John L. Holland, "Prediction of College Grades From the California Psychological Inventory and Scholastic Aptitude Test," Journal of Educational Psychology, L (1959), 135-42; Robt. C. Pace and Geo. G. Stern, "An Approach to the Measurement of Psychological Characteristics of College Environments," Journal of Educational Psychology, XLIX (Oct, 1958), 269-77.

[34] Pierson, loc. cit.

[35] Dale P. Scannell,"Prediction of College Success from Elementary and Secondary School Performance," Journal of Educational Psychology, LI (June, 1960), 134.

At Louisiana State University, Kim attempted to find the predictive value of a combination of tests designed to identify academic aptitude, study habits, motivation, and personality. Using the ACE, the Brown-Haltzman Survey of Study Habits and Attitudes and the Stern Inventory of Beliefs, he found that all these instruments improved prediction and that the factors of personality, motivation, and study habits had definite influence on college grades.[37] In a research report by Stagner, the conclusion is stated that "...personality influences achievement in an indirect way by affecting the degree to which use is made of the individual's potentialities...." He showed further that high emotionality and high self-sufficiency lead to lower achieve-

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36. Wilma B. Sanders, R. T. Osborne and J. E. Greene, "Intelligence and Academic Performance of College Students of Urban, Rural, and Mixed Backgrounds," Journal of Educational Research, XLIX (Nov. 1955), 190.

37. Ki Suk Kim, "The Use of Certain Measurements of Academic Aptitude, Study Habits, Motivation, and Personality in the Prediction of Academic Achievement," Dissertation Abstracts, XVIII (Jan, 1958), 150.

ment than would be predicted from intelligence scores.[38] Duncan Osborne's study of relationships of personality factors to academic achievement in college showed no correlation between academic achievement and need for achievement, need for order, need for affiliation, and strength of need.[39] William Mock's study of a group of students at the University of Georgia and Raymond Murphy's study of a similar group at the Pennsylvania State University seem to support this position.[40] Shaw and Brown found no significant relationships between college GPA's and personality characteristics, except that the underachiever appeared to be more hostile and hypercritical of others.[41] In a study of personality differences between under- and over-achievers at Yale University, under-achievers scored significantly higher on

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38. Ross Stagner, "The Relation of Personality to Academic Aptitude and Achievement," Journal of Educational Research, XXVI (May, 1933), 655.

39. Duncan Osborne, "The Relationship of Personality Factors to Academic Achievement in College," Dissertation Abstracts, XXIV (March, 1964), 3839.

40. Wm. L. Mock, "Selected Personality, Intellective, and Community Charactistics as Related to Academic Success of Univ. of Georgia Students," Dissertation Abstracts, XXII (Oct. 1961), 1087.

41. Merville C. Shaw and Donald J. Brown, "Scholastic Underachievement of Bright College Students," Personnel and Guidance Journal, XXXVI (Nov, 1957), 199.

the Strong Masculinity-Femininity Scale.[42]

There is general agreement that academic achievement is greatly dependent upon the motivations and aspirations of the student.[43] Many also feel that the college environment plays a most important role in achievement.[44] As far as predicting academic success is concerned, it appears that non-intellective factors used in combination with intellective factors may give some assurance of accuracy in prediction. One cannot help but agree with Cosand, who urged that efforts be made to develop subjective evaluation techniques, especially in the use of recommendations from principals, teachers, and others; interviews; and any other approach which might tend to make the admission process student-centered, rather than college-centered.[45]

Research on College Dropouts

One of the earliest national studies of dropouts was the one

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42. Francis J. Ryan, "Personality Differences Between Under- and Over-Achievers in College," Dissertation Abstracts, XI (April, 1951), 967-8.

43. Sturgis, loc. cit.

44. Vernon L. Hendrix, "Academic Rank Revisited," Junior College Journal, XXXV(Feb, 1965), 28; Donald L. Thistlewaite, "College Press and Student Achievement," Journal of Educational Psychology, L (Oct, 1959), 190.

45. Cosand, loc. cit.

conducted by John H. McNeely, in 1935-36.[46] Table 1 shows some of the relationships discovered.

TABLE 1

DROPOUT RATE DURING OR AT END OF SPECIFIED COLLEGE YEARS,
FRESHMEN ENTERING 1931-32

Class	25 Colleges			Univ. of Fla.		
	M	W	T	M	W *	T
Freshman	34.0	33.5	33.8	36.9	...	36.9
Sophomore	15.9	18.2	16.7	17.4	...	17.4
Junior	8.1	6.7	7.7	7.4	...	7.4
Senior	4.6	2.4	3.9	3.5	...	3.5

* No women registered at University of Florida during this period.

It will be noted that the University of Florida had a higher dropout rate than the total group of colleges, during the freshman and sophomore years. In the upper division, the University of Florida dropout rate was slightly reduced in relation to the other groups of colleges. These empirical differences were not subjected to statistical tests of significance.

McNeely also found that the attrition rate was higher in colleges of the Mountain and Pacific States than in the rest of the country. Over 71 percent of students in the West left their original colleges without graduating, 23 percent of these students were reported as having resumed their college work at other institutions. As for academic areas, he found that more students dropped out of Arts and Sciences than any other general group of studies; but there was also a fairly high return rate among students of Arts and Sciences. The gross dropouts from Home Economics were second highest in incidence, with such a low rate of returnees that their net dropout rate was highest of all.[47] There seemed to be no pattern of dropping out or returning with relation to size of institution. However, men were apparently more inclined to drop out than were women.

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[46] John H. McNeely, College Student Mortality. U. S. Office of Education Bulletin, No. 11, 1937, Washington, D.C.: U. S. Government Printing Office, 1938. p. 19.

Scates, in his study at the University of Chicago, found that freshmen who had below average records for their year of work were likely to drop out of college before graduating. Although some persisted, no more than 9 percent of the originally unsuccessful students eventually graduated. Of the students who successfully completed the freshman year, at least 60 percent were awarded degrees.[48]

The causes of student departure from college before completion of the normal degree program have been attributed to many factors. This is probably due to the fact that researchers have generally been dependent upon rather indefinite statements from the students themselves regarding their reasons for dropping out of college. Dominant among the causal factors of student attrition must be scholastic failure. However, this terminal cause of student dropouts is certainly dependent upon more basic or "first" causes which are yet to be explored adequately. In the following discussion, only those causes which have been subjected to research will be treated, notwithstanding the realization that many other, perhaps more complex, reasons for student attrition may exist.

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[47] McNeely, op. cit., p. 23, 28.

[48] Scates, op. cit., p. 216.

McNeely pointed out that causes of dropouts were quite uncertain, but principal reasons given by students were (in descending order): scholastic failure, financial need, illness and death, needs at home, and lack of interest in college. Older students were found to drop out more readily than younger ones. It was also found that students who worked part-time and/or participated in extra-curricular activities tended to stay in college.[49]

Slocum found that 51 percent of the dropouts from the State College of Washington were in scholastic difficulty at the time of their departure. The students reported their reasons for leaving as financial, shift in educational and occupationsl interests, scholastic, marriage, military, and homesickness.[50] In a study of three Florida junior colleges, Donald Lynch reported that the main reasons for dropouts were scholastic failure, loss of interest, and finances.[51] A University of Wisconsin study showed the ratio of compulsory dropouts to voluntary withdrawals was two to three. Most of the dropouts from both groups were poor students at the University, but some of them had been excellent students in high school.[52]

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[49] McNeely, op. cit., p. 59.

A study of the freshman class at Emory University revealed that 68 percent dropped out before graduation. The chief reasons cited for leaving were finances (25 percent), and dissatisfaction with the curriculum (20 percent).[53] In his doctoral research, Hanks found that the majority of students who dropped out of the University of Arkansas were having academic difficulty.[54] Gekaski and Swartz's study of Temple University students showed that 32 percent of the freshman class had dropped out of school by the end of the first year of attendance. The main reasons given by the students for leaving were change of interest (21 percent) and dissatisfaction (16 percent).[55] Cummings' study of Depauw University students revealed that "... the largest classes of dropouts were academic failures, curricular changes, finances, desire to be nearer home, and (females only) marriage."[56] A 1950 study of voluntary dropouts from the Purdue University freshman engineering class reported that students left mainly because of lack of interest and poor grades.[57]

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[50] W. L. Slocum, "Social Factors in Academic Mortality," College and University, XXXII (1956), 59.

[51] Donald F. Lynch, "An Analysis of Drop-Outs in Selected Public Junior Colleges of Florida," Dissertation Abstracts, XX (Feb. 1960), 3156.

[52] J. Kenneth Little, "The Persistence of Academically Talented Youth in University Studies," The Educational Record, XL (July, 1959), 238.

[53] Granville B. Johnson, Jr., "A Proposed Technique for the Analysis of Dropouts at a State College," Journal of Educational Research, XLVII (Jan. 1954), 385.

This brief summary of the reported causes of dropouts at the college level shows that academic failure is probably the most reported single cause of dropouts. A study of the research related to college persistence by Constance Waller agrees with this conclusion. She found that most researchers agree that withdrawals due to academic dismissals ranked first in incidence, with lack of finances in second position.[58]

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[54] Charles H. Hanks, "A Comparative Study of Factors Related to Retention and Withdrawal of Freshman Students at the University of Arkansas," Dissertation Abstracts, XIV (Aug. 1954), 1171-2.

[55] Norman Gekaski and Solomon Swartz, "Student Mortality and Related Factors," Journal of Educational Research, LIV (Jan. 1961), 192.

[56] Edgar C. Cummings, "Causes of Student Withdrawals at Depauw University," School and Society, LXX (Sept. 1949), 153.

[57] John S. Yuthas, "A Questionnaire Study of Voluntary Drop-Outs from Purdue's 1950 Freshman Engineering Class," Dissertation Abstracts, XV (Nov, 1955), 2068.

A recent statement by Carlson underscores the character of recent dropout research: "Most studies of college dropouts have concentrated on analyzing the academic reasons for failure, probably because these are the easiest to identify and categorize."[59]

There have been several studies which have attempted to identify the causes of academic failure. These studies have tried to answer the questions, what are the causes of failure, and what are the characteristics of failing students?

The answer to the question regarding causes of failure is quite complex, of course. Some of the recurring answers in the research are as follows:

1. Employment
2. Poor health
3. Excessive outside activities
4. Emotional upset
5. Inadequate academic ability
6. Poor reading habits
7. Poor study habits

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[58] Waller, op. cit., p. 292.

[59] J. Spencer Carlson and K. W. Wegner, "College Dropouts," Phi Delta Kappan, XLVI (March, 1965), 325.

8. Low quality of high-school preparation
9. Inadequate life-career motivation
10. Inadequate social adjustment
11. Deficiencies in institutional provisions for students
12. Parental conflict
13. Poor discipline in the home
14. Demands of society
15. Financial need
16. Marriage (women, especially).[60]

Lois B. Greenfield studied a group of freshman engineering students who dropped out of the University of Wisconsin. When compared with students who were still enrolled at the institution, the dropouts were found to be of lower general academic ability, lower pre-engineering ability, and lower rank in high-school graduating classes; they came from more limited high-school programs, high schools having little or no provisions for guidance; they received generally lower mid-term grades in the first semester of their freshman year, had less well-defined educational and occupational objectives, and typically lived off-campus, were somewhat financially embarrassed, and tended not to study very much. These differences were derived empirically, and were not subjected to any statistical tests of significance.[61]

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[60] K.L. Heaton and Vivian Weedon, The Failing Student. (Chicago: The University of Chicago Press, 1939), p. 102; Robt. I. Goble, "A Study of the Student Drop-Out Problem at Miami University," Dissertation Abstracts, XVII (Jan. 1957), 61; Hanks, loc. cit.; Johnson, loc. cit.; Dana L. Farnsworth, "Some Non-Academic Causes of Success and Failure in College Students," College Admissions. (Princeton, New Jersey: College Entrance Examination Brd, Educational Service, 1954), 72-8; James D. Cowhig, "Why Do They Leave College?" The School Review, LXXI (Autumn, 1963), 330-36.

Scates found that dropouts were described by their academic counselors and associates as either lacking in ability, lacking sufficient interest in college, engaging in too much "outside" work, or suffering from poor health.[62] There are many other studies which apply to this area, but to summarize, the factors which seem to be characteristic of the student who leaves college are as follows (not all can apply to any one case):

1. Lower socio-economic backgrounds
2. Lower academic ability or achievement in high school
3. High ability, low task oriented
4. Rural, small, inadequate high-school background
5. Aloof, self-centered, impulsive, assertive attitude
6. Irresponsible and dependent, or responsible and dependent, or irresponsible and independent behavior
7. Rebellious toward authority
8. Unconventional
9. Poor health (physical).[63]

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[61] Lois B. Greenfield, "Attrition Among First Semester Engineering Freshmen," The Personnel and Guidance Journal, XLII (June, 1964), 1003-10.

[62] Scates, op. cit., 336-7.

[63] Alex. W. Astin, "Personal and Environmental Factors Associated with College Dropouts Among High Aptitude Students," Journal of Educational Psychology, LV (Aug, 1964), 219-27; M.D. Sterrett, "Continuation and Withdrawal in a Selected Group of Arkansas College Freshmen," Dissertation Abstracts, XXI (Feb. 1961), 2164-5; A.B. Heilbrun, Jr., "Personality Factors in College Dropouts," Journal of Applied Psychology, XLIX (Feb. 1965), 1-7; M.B. Freedman, "The Passage Through

On the other hand, Cooper, in his study of junior college graduates, found that students who continued their education beyond the junior college level were not significantly different from non-continuers. He considered characteristics such as socio-economic status, parents' education, finances, and family relationships.[64]

Because of the generally high dropout rate at most colleges and universities--20 to 50 percent depending on the type of institution[65]--a variety of recommendations have been suggested by specialists who have studied the problem. These recommendations are as follows:

1. Colleges should expend whatever effort is needed to:
    a. Provide better counseling,
    b. Improve remedial reading services,
    c. Reexamine the curricula regularly and thoroughly,
    d. Encourage students to reenter college,
    e. Improve the level of instruction, and
    f. Achieve early identification of potential dropouts;

College," Journal of Social Issues, XII No. 4 (1956), 20; Harry A. Grace, "Personality Factors and College Attrition," Peabody Journal of Education, XXXV (July, 1957), 40; Scates, loc. cit.; Greenfield, loc. cit.

[64] Leland R. Cooper, "The Relationship of Selected Factors to the Continuance of Junior College Graduates at Senior Institutions." (Doctoral dissertation, College of Education, University of Florida, 1964), 130.

[65] Wm. W. Brickman, "College Enrollment and Dropouts," School and Society, (Jan. 9, 1965), 3.

2. Junior colleges should design special programs for dropouts;
3. High schools should work to improve their curriculums.[66]

It can be concluded from the available data that dropouts generally enter college with potential combinations of factors which later result in academic failure. Although present prediction measurements are able to identify some of these factors, other factors which obviously influence academic achievement have either escaped identification or have not been adequately studied. This may mean that greater emphasis should be placed upon studies of the effect of non-intellective factors on achievement.

Research on Reentering College Dropouts

There seems to be an increasing interest in readmission policies and returning dropouts. This is probably due to the fact that many dropouts at the college level tend to return, either to the original college or to some other college. Jex and Merrill indicate that the research story is shifting from "dropout" to "interruption." Their study at the University of Utah shows that students do tend to resume their college work someplace.[67]

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[66] W.R. Hill, "A Multivariate Comparison of College Freshmen with Adequate or Deficient Reading Comprehension," Dissertation Abstracts, XIX (June, 1959), 3211; M.F. Freehill, "The Cooperative English Test in Academic Counseling," College and University, XXIX (Jan. 1954), 252; R.G. Weintraub and R.E. Salley, "Graduation Prospects of an Entering Freshman," Journal of Educational Research, XXXIX (Oct. 1945), 116-26; Sidney C. Gould, "How Can We Help the Failing College Student?" High Points, XLV (Feb. 1963), 8-18; Gekaski and Swartz, loc. cit.; Jos. F. Kauffman, "Student Personnel Services: Some Questions and Recommendations," Educational Record, XLV (Fall, 1964), 363-65.

In research conducted at the University of Illinois and other cooperating Illinois colleges, Bruce K. Eckland found that dropouts were more inclined to reenter college than to remain out of college permanently. He chose a basic group of 1,180 entering University of Illinois students and found that 586 finished their degree work without interruption and 594 dropped out, but 417 of these dropouts reentered college (not necessarily the same college initially entered). Thus, 70.2 percent of the dropouts reentered college. He also found that 229 of these returning dropouts (59.9 percent) went on to graduate from college. Considering the total group of 1,180, 69.1 percent of the group eventually graduated within a ten-year period. Of the 188 dropouts who reentered college, but had not yet graduated at the time of completing the study, sixty were seniors who appeared to be on the verge of graduating. If these were included with the total of graduates, this would mean that 74.2 percent were successful in their college programs, graduation considered the criterion for success. It is interesting to note that 190 of the graduates received their degrees from institutions other than the University of Illinois.[68] One of the major observations Eckland makes is that researchers should realize that more than four years are usually required for the completion of requirements for the standard bachelor's degree, even for students who do not drop out. Eckland attempted to find some relationship between intervening military service (1952 - 1962) and subsequent achievement, but there was no significant relationship discovered. He did find that rank in high-school graduating class was more efficient in predicting dropout incidence than for predicting graduation. In a later article, Eckland underscored the necessity for allowing more time, even up to ten years, for students to complete their college programs. He felt this was necessary because so many of the students appearing in his study were actively engaged in completing degree requirements, long after the customary four years had elapsed. Another important finding was that problems which led to initial dropout apparently did not prevent reentry even if the problem still existed. Thus, some students returned to the college or entered some other college almost immediately following dropout, even though serious financial strain or family illness had reportedly led to

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[67] Frank B. Jex and Reed M. Merrill, "A Study in Persistence: Withdrawal and Graduation Rates at the University of Utah," Personnel and Guidance Journal, XL (May, 1962), 767.

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68. Bruce K. Eckland, "College Dropouts Who Came Back," Harvard Educational Review, XXXIV (Summer, 1964), 402-20.

original dropout.[69]

In research conducted at Vanderbilt University in 1957, Batts found that 49 percent of the 1950 entering classes of the College of Arts and Sciences and of the School of Engineering had withdrawn or had been suspended at some point within seven years following first registration. However, during the same period, over half of these dropouts had returned to graduate or were potential graduates at the end of the seven-year period.[70]

Hansmeier's study at Michigan State University of reinstated and readmitted students who had formerly been unsuccessful found no significant differences in success between men and women, veterans and non-veterans, various age groups, and groups with different ranks in high school graduating classes or of differing social status. "The subjects for this study were quite homogeneous in regard to the academic and non-academic criteria employed, a factor which limited the predictive and discriminating power of the variables."[71]

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[69] Bruce K. Eckland, "A Source of Error in College Attrition Studies," Sociology of Education, XXXVIII (Fall, 1964), 60.

[70] Wm. O. Batts, Jr., "Undergraduate Withdrawals at Vanderbilt University," (Doctoral dissertation, George Peabody College for Teachers, 1958).

[71] Thos. W. Hansmeier, "Factors Related to the Success After Readmission of College Students Academically Dismissed," College and University, XL (Winter, 1965), 202.

In studying returning dropouts at the University of Chicago, Scates found no important relationship existing between success after readmission and such factors as high-school GPA, previous GPA at the University, length of time enrolled at the University prior to dropout, or length of time student was away from the University.[72]

Husa, in his study at Northern Illinois University, attempted to find significant characteristics related to the success of students who were readmitted following academic suspension. A total of twenty-four characteristics were examined, particularly as related to discrimination between the readmitted students who were later suspended again and the readmitted students who ultimately graduated. The factors which seemed to offer help in prediction were the high-school rank in class, previous college GPA's, experiences while away from the university setting, type of housing while enrolled, the number of semesters attended prior to first dismissal, the number of credits earned prior to dismissal, and marital status.[73]

Another study of the performance of readmitted students at Michigan State University revealed that:

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[72] Scates, op. cit., p. 306.

[73] Harold E. Husa, "An Analysis of Various Characteristics Related to the Subsequent Success of Students Readmitted to Northern Illinois University Following Academic Dismissal," Dissertation Abstracts, XXII (Dec. 1961), 1874.

1. Students readmitted after one year's enforced absence tend to do better on return,
2. If they are very successful in the first quarter after reentry, students tend to stay out of academic difficulty,
3. A grade adjustment (ignoring grades in subjects not pertinent to new major) would help many,
4. College attendance while away is not significantly related to subsequent Michigan State University success.[74]

Warrington's research seems to differ with Dula's observation that suspension policies in Florida junior colleges do not cause students in academic difficulty to do better work.[75]

It is evident that a basic need exists for appropriate guidelines or improved techniques for handling applications for readmission of college dropouts. No doubt there has been considerable intra-institutional research on this matter at many of our colleges and universities. However, there is little information on such research in the literature. Eugene Edwin Robinson, in his doctoral dissertation, described the decision-making process of Purdue University's readmissions committee.[76] He identified the items of information used by the committee, and analyzed these items to determine their relative importance in the decision-making process. After acting as an observer of the readmissions committee's operations over a period of several months, Robinson cited the following items as appearing most frequently in discussion (in descending order): academic performance, school recommendations, seriousness of purpose, and outside or non-academic factors. On comparing the characteristics of readmitted and denied applicants, he found that the only difference between the two groups was in school recommendation.

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[74] W.G. Warrington, "Evaluation of the Performance of Students Readmitted After Having Been Academically Withdrawn from Michigan State University for One Year or More," Office of Evaluation Services, Oct. 16, 1964. (Mimeographed.), 12.

[75] Thos. C. Dula, "A Study of Academic Probation and Suspension Policies and Practices and the Outcomes of These Policies and Practices in Representative Public Junior Colleges," Dissertation Abstracts, XXI (June, 1961), 3683-4.

Scates, in reflecting on his study of returning dropouts at the University of Chicago, suggested that University officials would not be justified in refusing to readmit formerly dismissed students, if evidence could be presented to show added maturity or other significant changes which would indicate improved chances for success.[77]

A 1964 newspaper report ("Dropout Graduates to College") cited a successful experience in liberal readmissions at the University of Rochester. The University, over a period of five years, studied 179 students who had been readmitted after dropout. Seventy-six of these students had been originally dropped because of failing work, and 103 had withdrawn while doing satisfactory work. Of the group of seventy-six failures, 66 percent were successful following reentry, and 85 percent of the others were. The Administration was said to have reasoned that, if these students were originally considered qualified for admission, they should be entitled to a second chance if there were evidence that additional maturity or motivation might result in successful performance. In general, such evidence consisted of a satisfactory job record for at least a year.[78]

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[76] Eugene E. Robinson, "The Decision-Making Process of a University Readmissions Committee," Dissertation Abstracts, XXIV (April, 1964), 4069-70.

[77] Scates, op. cit., p. 383.

Summarizing this sampling of the literature, we find the following:

1. Men and women must be considered separately in conducting research on college dropouts;
2. Many factors must be considered when attempting to explain success or failure at the college level. These factors may be within the individual (personality), or be a part of the college environment which impinges on us all;
3. Statistically derived predictive techniques have not provided a final answer for predicting success in college;
4. There are many issues and problems present in the field of research on prediction of success and college dropouts:
    a. Statistics on college dropouts are largely fragmentary since there is no established, continuing program for studying college dropouts nationally;

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[78] 78. Miami (Florida) Herald. "Dropout Graduates to College," May 27, 1964.

b. There is still a scarcity of locally conducted research on dropouts, their return, and their relative levels of success;

c. The observation that predictive factors tend to change their significance over time implies that research on such factors should be replicated in order to maintain precision in predictive instruments employed.

In conclusion, it may be said that research on returning dropouts is a field of study needing considerable attention at many individual colleges. Only through research can policies and practices be revised on a scientific basis to provide for successful readmission policies for college dropouts.

CHAPTER III

PLAN OF THE STUDY

An effort was made to collect all pertinent data from the various offices of the University. These data are described in the following chapter. In the initial plan for the research, the Offices of the Registrar, Dean of Student Affairs, University College, and the University Physician were to be the sources of data. As the research progressed, however, it became apparent that the information available from these four sources was inadequate. Therefore, the plan was expanded to include records in the University Placement Office, the Office of the University Examiner and the offices of eleven upper-division schools and colleges.

It had been hoped that a fairly complete record of each student's activities at the University would be found in such sources, but there were certain deficiencies that will be mentioned later in this chapter.

As indicated earlier, the purpose of the research was to identify and evaluate certain factors associated with success which could be utilized in a university program for readmission of formerly unsuccessful students. This purpose required the isolation of a group of students that had been unsuccessful in earlier attempts at university work and had reentered the University at a later date. For this research, an "unsuccessful" student was defined as one who had been suspended for any reason from the University during his first year of attendance, or who had voluntarily withdrawn from the University after a date indicated in the Catalog as the "...last time for dropping courses without receiving a grade of 'E'."

Collection of Data

The group to be studied was limited to the unsuccessful students among those who entered the University as outright college freshmen in two successive autumns--September, 1959, and September, 1960. An alphabetized list of these students (one for each year) and lists of end-of-term suspensions for the Fall, Spring, and Summer terms of 1959-61 were obtained from the Office of the Registrar. The suspension lists were checked against the lists of freshmen, and suspensions were noted by the name of each freshman who had been suspended during his first calendar year of attendance. To obtain the names of students who had left the University by withdrawing after a critical date within the term, the Daily Withdrawal Reports, also from the Office of the Registrar, were checked for the period concerned. (Table 2 shows the dates which were deadlines for dropping courses without receiving failing grades.)

TABLE 2

DEADLINE DATES FOR DROPPING COURSES
WITHOUT RECEIVING FAILING GRADES

Year	First semester	Second semester	Summer session
1959-1960	Nov. 2, 1959	Mar. 21, 1960	July 11, 1960
1960-1961	Oct. 31, 1960	Mar. 20, 1961	July 10, 1961

Daily Withdrawal Reports for the entire two-year period were checked because they contained not only the names of all students who withdrew voluntarily, but also the names of those students suspended for any reason within the term. After those students who had been suspended within a term or had withdrawn voluntarily after the critical date had been identified, it was found that a total of 1,570 names were on the list to be checked to see whether or not these students had reentered.

A work card was now prepared for each of these students. The card stock used was a partially blank IBM card, the proper size and form to be compatible with IBM electronic computer and card-handling equipment. The cards were run through a duplicating machine to mark off sections for recording by hand the student's date of first registration, major field of study, semester hours of college work attempted, grade points achieved, semester hours passed, and miscellaneous data.

It could have been assumed that on the basis of the sources already used, the students of this group were all "dropouts" (as defined for this study) and that they had all entered the University in either September, 1959, or September, 1960. It was felt, however, that these assumptions should be checked before making further use of the data. This checking was carried on simultaneously with the recording of academic information from the files of the Registrar.

The first phase of data collection, for each of the 1,570 students, involved the reading and summarizing of the complete Registrar's records for each of these students. The information was derived from the permanent record cards, correspondence in student folders, petitions and other documents submitted by the students, and statements from University officials and faculty members which had been filed in these folders.

After all cards had been thoroughly checked and all data available from the Registrar's Office had been recorded, the cards were then sorted into three groups:

Group 1. Students not properly qualified to be subjects for the study. As a result of this checking, a total of 236 names were discarded from the study. It was found that some students had entered the University during a term other than the Fall term, some had briefly attended another college prior to entering the University of Florida, and a few names had appeared on withdrawal and suspension lists through error or because of actions which were later rescinded. For example, some students had filed notices of withdrawal with the Registrar but later, perhaps even the same day, had asked to have the withdrawals cancelled. Such students were not intended to be included in any phase of the study.

Group 2. Students who left the University during their freshman year and had not reentered the University prior to June, 1965. There were 957 students in this category.

Group 3. Students who left the University and reentered it at some time prior to June, 1965. These amounted to 377 students.

Only the third group, the returning dropouts, were selected for more intensive study in order to carry out the principal goal of the research.

At the conclusion of the Registrar's Office phase of the research, the following information had been recorded:

1. Academic achievement throughout the student's career at the University of Florida. This includes a term-by-term listing of semester hours attempted, grades earned, and hours passed both before leaving and after returning;

2. Academic achievement at colleges other than the University of Florida attended prior to final termination of attendance at the University of Florida (semester hours attempted, grade points earned and semester hours passed);

3. Administrative actions (suspensions, expulsion, reinstatements, graduation);

4. Voluntary withdrawals;

5. Major field of study as indicated at the time of first registration, and as changed during the student's subsequent attendance;

6. Change of name due to marriage or legal action. (This was necessary because records in the various offices might be found under either name.);

7. Notes regarding experiences or student activities which were pertinent to the study. These notes included such matters as military service, employment, illnesses, and family problems.

The second phase of data collection involved records in the Office of the Dean of Student Affairs. It had been hoped that the records in this office would contain much information of a different nature from that available in the Registrar's Office. These records contained academic reports sent by the Registrar at the end of each term of attendance. In most folders there was a form giving personal data (apparently completed by the student during the initial term of attendance). In some folders there were reports of disciplinary conferences and actions, fraternity and sorority pledge cards, reports of academic and personal counseling, reports of clinical services provided these students in the various University clinics, records of part-time employment by the University, lists of extra-curricular activities in which students participated, and notes regarding various behavior or emotional difficulties reported to the Dean of Men or Dean of Women. All these items of information were duly recorded on the work card and were identified as derived from files of the Dean of Student Affairs.

The third phase of data collection involved records in the offices of the various colleges of the University. The files of the University College were consulted for all students in the group to be studied. The great majority of the folders were located and relevant information was recorded on the work card of each student. Unfortunately, the practices of counselors had not been consistent in recording notes concerning counseling sessions or even the number of such sessions for each student. It was assumed that each student had had at least one session of course advisement with a counselor in the University College for each term he was enrolled. However, the evidence of extensive counseling or numbers of sessions of any type of advising was uncertain. There were some students for whom no folders were located. For the most part, these students had been away from the University for several years or had entered one of the upper-division colleges. Policies of the University College provided for discarding records of this nature.

After the University College records had been reviewed, visits were made to appropriate upper-division colleges. The upper-division folder for any student who had no folder in the University College, or who had earned approximately sixty semester hours or more, was sought. From records in the Office of the Registrar, it was known which students had actually enrolled in an upper-division college and which colleges were involved. Students whose records were still not located were sought in the college office which administered the department of study which the student had indicated as his major field. Folders for a few students were apparently lost or destroyed. However, the majority of these necessary records were located in the appropriate upper-division college. As a generalization, it can be said that counseling sessions in the upper-division colleges were rarely recorded. Any pertinent information available, however, was recorded on the work card.

Some of the upper-division colleges maintained separate folders on graduates, for placement purposes. These were the College of Business Administration, the College of Education, and the School of Journalism and Communications. Accordingly, these folders were checked, especially for information regarding extra-curricular activities and employment while away from the University.

The fourth phase of the data collection was the review of records in the University Placement Office. Here, the placement files of all thirty-five graduates in the group were reviewed. The facts available concerned military experience, final major field of study, fraternity or sorority membership, other extra-curricular activities, and employment experiences since high school.

The fifth phase of the data collection involved records in the Department of Student Health, better known as the University Infirmary. There were two sections of the Department from which data were collected: (1) In-patient and Out-patient Medical Clinics, and (2) Mental

Health Service. Folders for the majority of the students in the study were located in the In-patient and Out-patient section. It was assumed that students had never visited the Infirmary for treatment if no folder was found. The contents of each folder were read and information regarding the following matters was recorded on the work card: permanent physical disabilities, chronic ailments, major illnesses that resulted in permanent or temporary disablement or disfiguration, numbers and dates of occasions students were confined to the Infirmary as in-patients, numbers and dates of occasions students visited the Infirmary as out-patients. Of particular interest was the incidence of reported illnesses during final examination periods. Notations regarding the nature and duration of such illnesses were made on the appropriate work cards.

The records in the Mental Health Service were next reviewed for two main types of information: (1) reports of counseling sessions, and (2) scores on the Minnesota Multiphasic Personality Inventory (MMPI). It was found that very few students had utilized the facilities of the Mental Health Service. Reports of such counseling sessions as had occurred, however, were duly noted on the proper work cards.

The reports of scores on the MMPI were obtained in three groups:

1. The majority of the scores were available in punched-card form. These cards were sorted by the University Student Number, reproduced, and returned to the Mental Health Service. The reproduced file of cards was then matched by

electronic card collator against a punched-card file representing all freshmen who enrolled in September, 1959, and September, 1960. The resulting four groups of cards were as follows: two groups that matched (that is, two files of cards for the same people, one file showing test scores and student numbers, the other showing students' names and student numbers), one group representing freshmen for whom no scores had been located, and a group representing test scores for people other than freshmen entering in September, 1959, and September, 1960.

2. The second group of scores was located by checking a master list of test scores, provided by the Mental Health Service, which had reportedly been "run" from the original test score cards. Since about twenty-five sets of test scores were derived from this list, for whom scores had not been located in the card file, it was apparent that some of the original cards had been lost or misplaced. The scores which were found were recorded on a wide sheet of paper and were transferred into the punched-card file by use of an electronic card punch and verifier.

3. The final group of scores was located by the arduous process of checking individual answer sheets. Theoretically, this process would have been unnecessary because all the data from answer sheets had been transferred into punched cards several years ago. The remaining group of freshmen for whom no scores had been located, however, appeared too large for reliance on the assumption that the test had not been taken by all the persons in the group. After the file of answer sheets had been checked, an additional twenty-five sets of scores had been located. In general, it was found that the student had inscribed his student number incorrectly on the answer sheet, or the student number had been incorrectly punched for electronic data processing. When all sources of MMPI data had been exhausted, only a relatively small number of freshmen lacked scores, eighteen of whom were returning dropouts.

The final (sixth) source of data for returning dropouts was the Office of the University Examiner. This office provided the following information: (1) lists of all University College students enrolled in

September, 1959, and in September, 1960, showing scores on all parts of the Florida Twelfth Grade Testing Program (State norms); (2) a list of all University College students enrolled in September, 1960, showing verbal, quantitative, and total scores on the School and College Ability Test (SCAT) (Form I-C)--norms used were based on University of Florida freshmen; and (3) conversion tables showing the relationship of the Florida Twelfth Grade Testing Program--State norms--in 1959 and in 1960, and the ACE College Edition--national norms--to University of Florida freshmen norms.

When the study was originally planned, it had been assumed that all these test data were available in punched-card form. Since they were actually available only in list form, it was necessary to transfer the individual scores by hand from the lists provided to a roster which could be key-punched and verified. The punched test data included the five (State norms) scores on the individual tests of the Florida Twelfth Grade Testing Program, the total of these five scores, the University of Florida percentile rank of this total, and the University of Florida percentile rank of the three individual scores reported for the College Edition of the ACE and the SCAT.

Preparation of Data for Analysis

After the collection of data had been completed, the next step was to organize the data for analysis. To assist in the organization of data, a simple form was designed to provide spaces for insertion of codes which represented the facts which had been gathered. The form was "run" by an IBM 1403 printer, showing student number, student name, and headings for data codes. These forms were then completed by hand by transferring the "raw" data from work cards to codes on the printed form. The coded data forms were then given to a key-punch operator who punched and verified the data. It was thought advisable to provide space for the punching of each student's name and identifying numbers in each card pertaining to his record, except for the card containing MMPI data. Therefore, it was necessary to use five cards for each student in the study in order to have sufficient space for the data. In addition to name and identifying numbers, Card A contained data representing the academic record of the student. The academic record included semester hours attempted, grade points earned, semester hours earned, number of semesters attended during University of Florida attendance prior to first termination of attendance and type of termination; semester hours attempted, grade points earned and semester hours earned, and number of semesters attended during attendance at any college other than the University of Florida; and semester hours attempted, grade points earned, semester hours earned and number of semesters attended during University of Florida attendance after reentry.

In addition to name and identifying numbers, Card B contained test data, primarily. These data were as follows: Florida Twelfth Grade Tests, including State-wide and University norms; ACE (College Edition), University norms; SCAT (Form I-C), University norms; and year of first admission of the student.

Cards C and D were concerned with the student's activities before, during, and after the period of absence from the University. The activities and related facts, as recorded in Card C, were as follows: (1) for the period prior to first termination of attendance: number of extra-curricular activities in high school, number of visits to the Psychological, Reading, Psychiatric, and Mental Health Clinics, number of formal disciplinary actions taken, an indication as to whether or not the student had pledged a fraternity or sorority, number of stays in the Infirmary as an in-patient, number of visits to Infirmary as an out-patient, number of counseling sessions in the University College Office, proposed major field of study at the time of first registration at the University, number of extra-curricular organizations in which student participated, an indication as to whether or not student worked part-time, full-time, or not at all during his attendance, and number of months during which student held any such employment; (2) for the period during which student was away from the

University: number of months during which student was away from the University, an indication as to whether or not student was in military service and, if so, the total months of duration of military service, an indication as to part- or full-time employment and the number of months, an indication as to whether or not student was enrolled at some college other than the University of Florida and, if so, the number of extra-curricular organizations in which he participated while there and an indication as to whether or not his enrollment was as a credit or audit student, the number of counseling sessions conducted by any non-clinical office of the University, the number of visits to any University clinic and an indication as to whether or not student enrolled at a high-school level preparatory school or received clinical assistance from some agency other than the University.

In Card D, the information was concerned with the student following his reentry to the University. These data are classified as follows: the number of visits to University clinics, number of formal disciplinary actions, an indication as to whether or not student was a member of a fraternity or sorority, the numbers of times student was an in-patient and an out-patient at the Infirmary, the major field of study, if indicated, an indication concerning whether or not student worked at a part-time or full-time job, the number of months such employment continued, the number of counseling sessions in the University College Office, the number of counseling sessions in the Office of Student Affairs, the number of counseling sessions in any upper-division college, the number of extra-curricular organizations of which student was a member, the month and year of graduation (if student had received a degree from the University of Florida at the time of this study), an indication concerning the student's final status or termination at the time of this study (enrolled, permanently suspended, voluntarily withdrawn, etc.), number of approved applications for re-admission since final termination of attendance, and number of denied applications for readmission.

The final Card (E) contained the coded year of birth of the student; coded sex of the student; K-corrected, raw scores on the MMPI (for the scales designated Q,L,F,K,Hs,D,Hy,Pd,Mf,Pa,Pt,Sc,Ma,and Si); "T" scores for the most commonly used scales (the last ten of the scales just enumerated) and a ten-digit "code word" showing the ranking, in descending order of magnitude, of the "T" scores.

These punched cards were next assembled in student-number order, Cards A through E arranged in alphabetical order for each student. The cards were then processed through a 1401 IBM Computer to record all the data on magnetic tape. It was felt that more efficient manipulation of the data would be possible by the use of this small computer and magnetic tape than if the analysis were attempted from the punched cards directly.

After the information had been recorded on tape, it seemed desirable to have frequency distributions on all characteristics of the students under study. Therefore, a program was designed to extract simple frequency distributions on all characteristics by sex and total. Approximately thirty seconds of computer time was required for each frequency distribution which made it possible to obtain the desired distributions with less than three hours of machine operating time. There were several reasons for desiring these distributions as the first step in data analysis:

1. During the process of collecting the data, it had been apparent that some factors under study were not reported for any large number of the returning dropouts. However, the actual frequency distributions clearly indicated those factors which were present to such a limited degree to negate more sophisticated, statistical treatment.

2. The range and relative complexity of factors, as revealed by the frequency distributions, enabled one to see at a glance which factors were likely to lend themselves to correlations, and which ones were to be analyzed by other means.

3. Several factors, when distributed simply by sex and total, demonstrated a need for finer subdivisions to show the interrelationships of characteristics. Thus, a review of the first set of simple distributions enabled the writer to identify those factors which needed to be subdivided and redistributed.

Techniques of Analysis

When these simple frequency distributions had been studied by the writer, a plan of analysis was developed as follows:

1. Frequency distributions of several characteristics were made with controls set to compare subgroups. For example, distributions of predropout grade-point averages were run for fraternity pledges and for non-fraternity men. These particular distributions have been summarized in Tables 35, 36, and 37, in Chapter V. Many other distributions were run; in fact, a total of 1,833 distributions were prepared of which only a small percentage was included in this report.

2. Correlation coefficients were computed for various factors which appeared to be related. For example, see Tables 10, 19, and 60, in Chapter V. The formula used for computation of the coefficients of correlation is as follows:

$$r = \frac{\Sigma XY - n M_x M_y}{n \sigma_x \sigma_y}$$

where $\sigma_x = \sqrt{\frac{\Sigma X^2}{n} - M_x^2}$ and $\sigma_y = \sqrt{\frac{\Sigma Y^2}{n} - M_y^2}$

3. The mean grade-point averages for various subgroups were compared and tested statistically for significance of differences. The formula used for testing is as follows:

$$t = \frac{\bar{X} - \bar{Y}}{\sqrt{\left(\frac{\Sigma x^2 - \Sigma y^2}{M_x + M_y - 2}\right)\left(\frac{M_x + M_y}{M_x \cdot M_y}\right)}}$$

4. Tables illustrating the identified relationships were designed and included in this report.

CHAPTER IV

DESCRIPTION OF DATA

Several different kinds of data were used in this study. For purposes of discussion, these data were classified as follows: (1) standardized test results, (2) other academic data, and (3) non-intellective data.

Standardized Test Results

There were four groups of data in this category: results from the Florida Twelfth Grade Testing Program, the American Council on Education Psychological Examination, The School and College Ability Test, and the Minnesota Multiphasic Personality Inventory. Each of these tests or test batteries will be discussed in order.

Florida Twelfth Grade Testing Program

The Florida Twelfth Grade Testing Program (FTGTP) is administered each year in all Florida high schools by the University of Florida. The high-school principals, or persons designated by them, administer the battery of tests and return them to the University Examiner for scoring and distribution of the results. The scores reported by the Examiner's Office are expressed in percentiles, based on the entire group of high-school seniors taking the tests that year. A total score, which is simply the sum of percentiles earned by each student, is also reported.

The results of these tests are used throughout the State of Florida for counseling purposes (in high school and in college) and for admission to college. All the State universities use the results for admission and counseling and the majority of junior colleges and private colleges make similar use of them. The University of Florida was requiring a minimum total score of 200 on these tests for the admission of freshmen at the time students in this study were admitted.

The FTGTP battery consists of one test in general academic ability, and an achievement test in each of the areas, English, Social Studies, Natural Sciences, and Mathematics. At the time the students in this study were tested, the tests used were as follows:

1. General academic ability--American Council on Education Psychological Examination, High School Edition,
2. English--Cooperative English (Effectiveness of Expression),
3. Social Studies--Cooperative General Achievement in Social Studies,
4. Natural Sciences--Cooperative General Achievement in Natural Sciences, and
5. Mathematics--Cooperative General Achievement in Mathematics.

Obviously, the total score (sum of percentiles) could be as low as zero, or as high as 495 (a percentile score of 99 on each of the five tests). A score of 200 placed the student at approximately the fortieth percentile, State-wide.

The University admitted some students from states other than Florida and a few from Florida who had failed to take the FTGTP tests. These students were required to take the tests before completing registration, unless they were full-time University employees or foreign students.

American Council on Education Psychological Examination, College Edition

The American Council on Education Psychological Examination (commonly called the ACE) is a test of general academic ability. It was published by the Educational Testing Service for many years, through several editions. The high school version of the test was used as part of the battery of the FTGTP. The college version was used by the University of Florida in its counseling program from 1950 through 1959. There were several revisions of the college version, but since the University began its use with the 1949 edition, the University Examiner continued to use that edition in order to maintain consistency in the data. The publisher finally replaced the ACE with the School and College Ability Test (SCAT). The University adopted the SCAT as a replacement for the ACE beginning in 1960.

The ACE was administered routinely during orientation to all lower-division students enrolling for the first time at the University during the period 1950 through 1959. Therefore, the students in this study who enrolled in 1959 took this test unless exempted because of foreign status or employment as full-time University employees. The answer sheets were scored locally by the University Examiner, and the results were distributed to appropriate offices. The scores were reported in national percentiles, based on entering freshmen in four-year colleges. Each person received three scores from the test: Quantitative, Linguistic, and Total. The total score was obtained by combining the raw scores in the quantitative and linguistic parts of the test and assigning percentile ranks to the resulting sum.

In order to make the data more valuable for purposes of this study, the writer used a conversion table provided by the University Examiner to convert the ACE scores for returning dropouts to local percentiles based on the total group of freshmen taking the test in September, 1959.

School and College Ability Test

The School and College Ability Test (SCAT) is published by the Educational Testing Service, in several forms and levels of difficulty. The form used by the University (Form I-C) is restricted to the use of colleges for administration to admitted students. Like its predecessor, the ACE, it is a test of general ability, academically. It is different from the ACE, however, in that it is not so dependent on time limits in administration, it has better balance between verbal and quantitative items, and its results are not as susceptible to coaching. The publisher reports correlations ranging from +.76 to +.87 between the SCAT and ACE.[79]

The SCAT has been administered to all lower-division students (except foreign students and full-time University employees) entering the University, beginning in 1960. The procedure has been to include the test routinely as a part of orientation. The University Examiner administers the test, scores the answer sheets, and distributes the results to appropriate offices. The scores are expressed in percentiles based on the total group of freshmen taking the test at the University in the fall of the year considered. Thus, the SCAT data for the returning dropouts were available in usable form, without conversion.

Minnesota Multiphasic Personality Inventory

The Minnesota Multiphasic Personality Inventory (MMPI), published by the Psychological Corporation, is a test designed to provide in one instrument a method for arriving at objective measures on

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79. Educational Testing Service. Cooperative School and College Ability Test, Technical Report. Princeton, New Jersey: Educational Testing Service, undated. p. 19.

all the more clinically important phases of personality.[80] The authors (Hathaway and McKinley) were attempting to devise an instrument from the point of view of a clinical or personnel worker who wished to examine the traits commonly characteristic of psychological abnormality.

The MMPI comprises 550 statements covering subject matter ranging from the physical condition of the individual being tested to his morale and social attitude. Though the MMPI was originally standardized with persons considered psychologically "abnormal," considerable experimentation and validation have shown that the Inventory is also useful for classification and understanding of "normal" persons.

When a person takes the MMPI, he is asked to respond to all statements, which are in the first person, as True, False, or Cannot Say. After he has indicated True or False to all the items that he can about himself, his responses are counted so as to yield scores on four validity scales and ten clinical scales. There are several other clinical scales having special applications, but none of these has

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80. The material in this chapter dealing with the MMPI is drawn from three main sources: W.G. Dahlstrom and G.S. Welsh, An MMPI Handbook. (Minneapolis: The University of Minnesota Press, 1960); S. R. Hathaway and P.E. Meehl, An Atlas for the Clinical Use of the MMPI. (Minneapolis: The University of Minnesota Press, 1951); and S. R. Hathaway and E.D. Monachesi, Analyzing and Predicting Juvenile Delinquency with the MMPI. (Minneapolis: The University of Minn. Press, 1953).

been used in the University of Florida testing program. In fact, these additional scales are scored only when the implications of a given scale are applicable to some special problem being evaluated.

The time required for the administration of the MMPI may be as much as ninety minutes but college students usually complete it within about half an hour.

Four of the commonly scored measures are related to the accuracy and reliability (validity) of the subject's responses, and the remaining ten (clinical) are related to various aspects of personality. All the clinical scales are named with letters and numbers rather than the longer diagnostic terms for which the letters are abbreviations. For example (see Table 3), a scale originally derived from a study of schizophrenic patients is called "Sc," but this scale is better referred to as Scale 8 since it was the eighth scale derived for clinical use.

The descriptive name for each scale was derived from psychiatry and was applied to the scale only because the clinical group on whom it was developed had been diagnosed by the given term.

Psychologists prefer to call the clinical scales by the numbers one to ten rather than by letters, thus reminding the uninitiated that persons who obtain high scores on clinical scales are not necessarily mentally ill. The original use of scales derived from patients grouped

TABLE 3

MMPI SCALES USED AT THE UNIVERSITY OF FLORIDA

Scale number	Scale abbreviation	Scale name
		Validity
..	Q	Cannot Say
..	L	Lie
..	F	Response Conformity
..	K	Attitude Correction
		Clinical
1	Hs	Hypochondriasis
2	D	Depression
3	Hy	Hysteria
4	Pd	Psychopathic Deviate
5	Mf	Masculinity-Femininity
6	Pa	Paranoia
7	Pt	Psychasthenia
8	Sc	Schizophrenia
9	Ma	Hypomania
10	Si	Social Introversion

under psychiatric terms was not intended to mean that diagnostic categories are entirely reliable or stable or that these categories are pure ones. The argument in favor of these scales rests simply on the fact that "the psychiatric syndromes of symptoms have come to be widely accepted as having prognostic and internally cohesive relationship and the nomenclature has an almost universal semantic standing."[81]

The MMPI Scales. Presented below is a brief discussion of the fourteen scales commonly scored from the MMPI with emphasis on the interpretation of high and low scores on these various scales.

The Q Scale. The score on the Q Scale is obtained by counting the number of items in the Inventory that the subject did not answer (those he placed in the category Cannot Say). Subjects are routinely urged to say True or False to nearly all the items. A low score on this scale means that the subject has attempted to satisfy this instruction. A high score means that any conclusions would be unsafe, since so many items were left unanswered.

The L Scale. This group of only fifteen items yields a score tending to indicate any attempt on the part of the subject to portray himself as better than he is, mainly in regard to personal ethics and social behavior. High scores are obtained on persons who try (even unconsciously) to answer all the test items in ways that will seem to fit the subject's perception of society's moral code, even if he knows that he fails to meet this standard.

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[81] Hathaway and Monachesi, op. cit., p. 14.

The F Scale. The F score is somewhat the opposite of the L score. Persons obtaining a high F score may be attempting (perhaps unconsciously) to show themselves as in a bad light, or they may be just overly candid. The F score is also high if the subject, for any reason, fails to answer carefully or consistently. For example, high F scores often result with persons who cannot read well enough to make discriminative responses. Of particular significance for use of the Inventory with young people is the fact that F scores tend to be high when the student answers carelessly or makes random or facetious responses to the items. Another source of moderately high F scores is general maladjustment of a severe type.

The K Scale. Special interpretation of the K score is not usually made because the score is mixed with five of the clinical scales in a way that properly uses the score as a correction. In general, higher K scores, in a less direct fashion than L scores, indicate defensiveness and lack of candor. Low K scores, like high F scores, indicate a subject's frankness and objectivity in looking at self.

Scale 1 (Hs). This scale was derived by comparison of normal persons with patients having many physical complaints with generally psychological bases. Although some complaints are definitely based on organic causes, high scores on Scale 1 usually indicate illnesses of a symbolic nature, commonly called "psychosomatic" complaints.

Scale 2 (D). Persons who were chronically depressed were the validating group for this scale. Individuals who receive high 2 scores usually feel insecure, are unsure of the future, and are characteristically sad and "blue." Since this scale seems to be especially susceptible to moods of the individual, there is need for caution in interpreting the scale, especially if the subject may have been in a depressed mood at the time of completing the Inventory.

Scale 3 (Hy). There is considerable relationship between this scale and Scale 1. The main difference is that there is apparently a more complex rationalization of complaints with high scorers on Scale 3. These people tend to be sufferers from maladies such as allergies and functional heart ailments. There is no conscious effort on the part of the sufferer to disguise the psychological aspect of his illnesses; he simply does not realize any relationship between his problems and his mental condition. Persons with high Scale 3 scores also tend to avoid critical tests of their stability and would rather avoid any "showdown" if possible. Their response to unavoidable pressures will often be some type of illness which will excuse their retreat to themselves, as well as to others.

Scale 4 (Pd). The patients from whom this scale was derived were diagnosed as psychopathic deviates. Mostly young and delinquent, these individuals did not seem to be controlled by the usual standards of society. They possessed little remorse and seemed not to benefit from censure or punishment. Their delinquency frequently lacked obvious motive. Not all social deviates will score high on Scale 4. More than mere delinquency or criminality is needed to establish the diagnosis of psychopathic deviate. One may only be confident that of any asocial or antisocial group there will be some persons who would be so diagnosed if studied sufficiently. Young people who score high on Scale 4 are more likely than adults to be in conflict with their families, but the social conflict within a university setting could be extensive.

Scale 5 (Mf). This scale is designed to measure the interests one has as compared with the interests of others of the same sex. A high score on Scale 5 indicates interests common to the opposite sex. Thus, a male subject with a high Scale 5 score has interests more similar to females than to other males. Male homosexuals tend to have high scores; and female homosexuals generally score high, but to a lesser extent than do the males. However, high scores really refer to the interests of the individual and cannot safely be taken as evidence of homosexuality. In fact, several studies have demonstrated that fairly high scores on this scale tend to indicate a studious attitude, with some confident expectation of academic success.

Scale 6 (Pa). Since this scale was developed from studies of paranoic individuals, it is considered a measure of undue interpersonal sensitivity. In aggravated situations a person may have paranoic feelings about other people in which he perceives himself as mistreated or threatened. Anyone under close supervision or control is subject to a moderate elevation of this score.

Scale 7 (Pt). Subjects with high Scale 7 scores are in some ways excessively meticulous or overly conscientious. Such behavior does not generally dominate, but can be noticed in certain areas of life. High Scale 7 scorers may also be chronic worriers, hypercritical of themselves, or introspective to an extreme. Some delinquents, such as arsonists, exhibitionists, and rapists are known to be driven by obsessions or compulsive energy; and those tested with the MMPI have tended to score high on this scale.

Scale 8 (Sc). In general, this scale could be considered as an indicator of the extent to which an individual perceives the world around him in the same way as do his peers. A high score may indicate that one is tending toward schizophrenia, but in the general population, an elevated score is more indicative of unusual perceptiveness of the world or unexpected reactions to commonplace stimuli.

Scale 9 (Ma). Derived from work with manic patients, this scale is used primarily as an indicator of energy or drive. A high Scale 9 score is usually obtained by a person of enthusiasm, one who approaches life with gusto and attacks problems with vigor. Young people are inclined to score high on this scale. If the score is excessively high, one may expect the subject to be characterized by restlessness, erratic behavior, or even violence. Such antisocial behavior for high Scale 9 individuals seems to stem from pent up energy seeking some release.

Scale 10 (Si). This scale is an indicator of the individual's tendency toward social introversion or extroversion. A high score indicates that he is inclined toward seclusion, not being especially comfortable in social inter-relatinnships. A low score, on the other hand, is indicative of a gregarious spirit, a desire to join social clubs, an inclination to be active in group life.

The MMPI Profiles. The raw scores of the clinical scales are normally converted to T scores. These are standard scores derived from normal adults with the mean adjusted to fifty and the standard deviation adjusted to ten. Thus, a T score of seventy on a scale falls two standard deviations from the mean. Normal persons can be expected to score seventy or higher on a given scale with a frequency of about 5 percent. As a T score increases, abnormality is indicated.

After all scores are obtained and corrected as indicated by the validity scales, they are inscribed in order across a graph showing their relative size. The "high points" on this graph, or profile, are the scales which show the highest T scores. A great deal of the literature concerns studies that have been made of these "high points." While it is true that the high points indicate tendencies toward abnormality, the "low points" may be of equally valuable reference, at least for some scales. It has been assumed by some that the lower the score, the more normal the individual. However, this hardly seems logical, since the low scores represent deviations from the mean, or norm, just as do the high scores. More research is needed on this point.

At the University of Florida, the MMPI has been routinely administered to all entering students since September, 1959. There are some students who failed to take the Inventory, since it was not an absolute prerequisite to registration. However, only a negligible number of students in this study failed to take the MMPI. The Inventory was administered by staff of the University Mental Health Service under appropriate conditions. The answer sheets were then scored under the supervision of the Service and profiles were drawn. For research purposes, the raw scores as well as the T scores were retained, and these were made available to the writer.

In studies conducted by the Mental Health Service, there has been a noticeable difference between students who remain in school and those who drop out, such differences reflected in the scores on the MMPI. Among those who dropped out of the University, there was a higher percentage of men with Scale 9 "high points" and women with Scale 5 "high points" than in the group who remained. The dropout group had a lower percentage of men with Scale 5 "high points" and women with Scale 6 "high points." Among the group that persisted in school, there seemed to be a better chance for success for men with high Scale 5 scores than for men with high Scale 9's. Work is continuing toward more exact definition of the applications of the Inventory in prediction of success of University students.

Table 61 (see Appendix) presents an analysis of the incidence of various "high points" in University of Florida entrants. This table also includes a comparison of the 377 returning dropouts of this study with the total entrants for a two-year period.

Other Academic Data

There is no exact way of separating academic data from non-intellective data. However, for ease of discussion, academic data other than standardized test results will be described under the following headings: (a) University achievement, (b) achievement at colleges other than the University of Florida, (c) clinical and mental health services provided by the University, and (d) student plans and objectives.

University Achievement. In any educational enterprise, there are many ways of evaluating achievement. At the University of Florida freshman achievement is evaluated primarily by the use of comprehensive final examinations. The normal course load for a freshman includes a minimum of three comprehensive courses, physical education, and (in the case of men) military science. The course load naturally depends on the intended major field of study. A pre-engineering student's program will usually be much different from the program of a student majoring in English. Nevertheless, each student will generally take at least the first semester of freshman English (C-31) and the first semester of social science (C-11), with the remainder of the first term's work slanted toward his specific educational objectives. As students progress through their university careers, the dissimilarities in programs increase. For the students in this study, the modal course load for the first semester was sixteen semester hours. The mean course load (excluding withdrawals) was just over fourteen semester hours. Since the semester-hour value of C-11 and C-31 totaled eight semester hours, it is apparent that the selection of about half the load to meet major field interests was possible.

The comprehensive examinations for the "C" courses are administered by the University Examiner. The weighting of the final examination in relation to within-term testing and individual teacher evaluation is an administrative matter determined separately for each course. Regardless of whether recognition is given other factors, or not, the final examination is of primary importance in arriving at the grade in any comprehensive course. The method of determining final grades for courses other than "C" courses is left to the individual instructor. However, instructors whose clientele consists primarily of freshmen are inclined to rely heavily on testing for determination of grades. The result is that grades earned by the students in this study before dropout are dependent almost entirely on the manner in which the individual student coped with a test-heavy approach to grading.

As students progress through their programs at the University, they encounter a higher percentage of courses where achievement is evaluated on bases other than comprehensive testing. Achievement in these courses, primarily offered to upper classmen, is typically evaluated by use of term projects, term papers, periodic essay examinations, and other "subjective" techniques, as well as by the traditional final examinations. The use of a variety of evaluative techniques could work to the advantage of a student inclined to "freeze" on heavily weighted, final examinations.

For purposes of this study an analysis of the specific courses taken by the students was not attempted. Perhaps a later study could reveal significant implications for student success from the patterns of course registration of dropouts or returning college dropouts.

A detailed description concerning the procedure in collection of achievement data is included in Chapter III.

Achievement at Colleges Other Than the University of Florida. Although it was not an objective of this research to identify the reasons why students dropped out of the University, the researcher could not avoid recognizing that students left for a great variety of reasons. These reasons were stated in letters and official documents filed in student folders. One of the reasons for departure given by a fairly large group was "to enter another college." The statistics regarding the attendance of these students elsewhere is covered in detail in Chapter V. However, it may be helpful to point out certain facts regarding the phenomenon of transferring to other institutions after dropping out of the first college attended.

College registrars and admissions officers traditionally object to the admission of transfer students where the former college record reveals below-average achievement and/or enforced termination of attendance. Since the majority of the students included in this study did not have "C" averages and were suspended from the University at the end of their first period of attendance, it is hardly remarkable that few of these students were successful in gaining admission to some other college or university.

Another problem confronting the dropout is the discouragement and confusion which may result from his academic failure, or may have even contributed to the failure directly. A decision to transfer to another college requires a certain degree of self-confidence which may not be present in the majority of unsuccessful freshmen.

The type of data regarding college achievement elesewhere was necessarily limited to those factors which lend themselves to recording on transcripts. These notations consisted of hours attempted and passed, grade points earned, administrative actions taken elsewhere (suspensions, graduation, and honors), and dates of attendance. No attempt was made to analyze the specific course patterns or to differentiate between types of colleges attended. No doubt, an interesting study could be made of these factors with rewarding results.

Clinical and Mental Health Services Provided by the University. Through the Florida Center for Clinical Services, the University has provided assistance to citizens throughout the State of Florida, as well as to its students. The Center has especially assisted students with solutions to problems which tended to interfere with their academic progress. Among the clinics available at the University are the following: Speech and Hearing, Psychological, Reading, Marriage and Family, and Adapted Exercise.

Records of specific clinical services performed for the returning dropout were made available through the Office of the Dean of Student Affairs. No mention was made in these records of clinical services other than those provided by the Psychological Clinic and by the Reading Clinic. Therefore, it was assumed that none of the 377 returning dropouts had occasion to utilize the services of the other clinics named. Chapter V includes a description of the frequency of utilization of the two clinics by the group studied.

Information regarding the extent to which the returning dropouts consulted with the University Psychiatrist was quite limited. There were some references to psychiatric consultation in the files of the Dean of Student Affairs. There were also some references to visits to the University Psychiatrist in the records maintained by the Student Health Service. Judging from conversations with present members of the staff in the Student Health Service, it may be assumed that the records of psychiatric consultations were not maintained with the same degree of accuracy in 1959 and in 1960 as they are now. It also appears likely that a student with serious mental illness would not consult with the University Psychiatrist, but would prefer to seek a psychiatrist with the assistance of his parents. It is quite possible that some of the students who withdrew for "personal" reasons were actually leaving the University for the purpose of obtaining professional help with their problems, some of which may have been emotional in nature.

The Mental Health Service was established in 1959 as a part of the Department of Student Health. One of the major projects undertaken by the newly created service was the administration and utilization of the MMPI testing program at the University. The data from this program have been described earlier in this chapter. In addition to use of the MMPI results, the Mental Health Service provides personal counseling in emotional or other phases of student life wherein problems arise. In general, academic counseling is left to the instructional departments of the University, but if a student comes to the MHS with an academic problem he is helped as much as possible by the staff of psychologists and psychiatrists. The data obtained and recorded from records of the Mental Health Service indicated that very few of the students in this study made use of the facilities available to them.

Student Plans and Objectives. When students apply for admission to the University of Florida, they are asked to indicate on their applications a proposed major field of study. This type of request is standard procedure with colleges. Unfortunately, students tend to make choices of majors without sufficient information on which to make their decisions. The writer believed that there might be some relationship between proposed major field of study and success, however.

For this reason, the applications for admission of the returning dropouts were reviewed to obtain their proposed major field data. When the records of the University College and the upper-division colleges and schools were reviewed, the major fields were checked to see whether or not the major field choice had changed. Of the 377 students included in the study, a total of 135 changed their majors at least once during their stay at the University.

The data regarding counseling, or course advisement, in the various colleges and schools of the University are not exact enough to warrant many conclusions. In general, the advisors did not keep records of individual conferences as they no doubt occurred throughout the student's stay at the University. In the upper division, the typical student folder contained a planning sheet which had been prepared at approximately the time of his first registration in that college or school. Since the University requires a signature of the advisor (or of the Dean or Director of the student's college or school) on the course assignment card each term, it may be assumed that some counseling or advising took place at least once each term. This assumption accounts for the majority of the "counseling sessions" detailed in various tables, e.g., Table 22 in Chapter V.

Non-Intellective Data

In this section will be discussed the various types of data which do not appear to the writer to be "academic" in nature. These data will be discussed in the following order: (1) extra-curricular activities, including activities in high school and in the University, with special attention to affiliation with fraternities and sororities; (2) disciplinary actions; (3) military and work experiences, especially as related to the period during which the student was away from the University; and (4) physical health, as indicated by utilization of facilities of the Student Health Service.

Extra-Curricular Activities. The Office of the Dean of Student Affairs requests each student to complete a data card shortly after he enters the University for the first time. One of the items of information requested concerns the number and types of extra-curricular activities in which the student participated while in high school. The students generally complete this section of the card by listing the organizations of which they were members in high school, whether or not the organizations were official high school activities. Thus, one may find "Student Council" and "Boy Scouts" listed as extra-curricular activities for a given student. Regardless of whether all such organizations could properly be grouped together, or not, they were considered under the general category of extra-curricular activities for purposes of this research.

There were very few indications in the files regarding student activities at the University other than those concerning the pledging of fraternities or sororities. The data concerning the other organized student activities, while limited, were derived mainly from the Office of the Dean of Student Affairs and from placement folders in the various upper-division colleges and in the University Placement Office. Any type of organization which was listed in these files, was counted in arriving at a total of activities for the individuals in the study. These organizations tended to be special-interest groups (such as The Latin American Club), scholastic societies, and social fraternities and sororities. Participation in these social organizations was noted for special attention, since there was some interest in determining whether or not fraternity and sorority affiliation would have any relationship with the success of returning dropouts. Table 37 in Chapter V was designed to portray these data.

Disciplinary Actions. Disciplinary actions at the University of Florida are generally initiated through the Office of the Dean of Student Affairs. Any disciplinary actions initiated elsewhere are at least coordinated through his office. Thus, the Student Affairs records were the source of all disciplinary information.

It was felt by the writer that some types of behavior problems would have no bearing on academic success. Therefore, all notations regarding minor traffic violations or financial difficulties were ignored for purposes of this study. A tabulation was made of the number of students who were involved in any more serious behavior problems, with special note regarding any that were involved in more than one breach of conduct. Students who were required to leave the University because of disciplinary reasons are handled as a separate category (see Table 27 in Chapter V). Those involved in disciplinary actions less stringent than suspension or expulsion are included in Table 48, Chapter V.

Military and Work Experience. Records of employment by the University were included in the files of the Dean of Student Affairs, since student employment is administratively a responsibility of the Dean. Information regarding employment by firms or agencies other than the University was available from a variety of sources. Several students included information regarding non-University employment when completing forms or writing letters to be handled by the Registrar or by other offices whose records were reviewed systematically during this study. One of the richest sources of data regarding employment was the University Placement Office. When students complete a data form for assistance in obtaining placement, they are asked to list any previous employment. The data from these forms were more complete than from any other source located. These data pertained to the period of absence from the University (the period of dropout status) as well as the periods of enrollment at the University. Unfortunately, only the thirty-five graduates had folders in the placement files.

When students apply to reenter the University, they are asked to indicate on the readmission form whether or not they have served on active duty in military service. It was impossible to locate all the applications for readmission. Therefore, the data regarding this matter are somewhat limited. In general, the data may be said to be accurate where military service has been indicated. However, it is quite probable that more of the returning dropouts served in the military while out of college than are indicated.

Physical Health. The University Department of Student Health (better known as the Infirmary) maintains a file of folders for all students who have utilized the services of the Infirmary at any time. These folders were made available to the writer, so that the complete physical record of each returning dropout could be reviewed. A notation is customarily made in the student's folder each time he is seen by a member of the Infirmary staff. This notation, while usually abbreviated, indicates the purpose of the visit, the condition of the student's health, and any treatment prescribed. Of all the agencies of the University dealing with the student in an individual manner, the Infirmary appeared to have the most complete records. The writer was also impressed with the number of notations indicating that the student had asked to see a doctor and had simply sat and talked with the doctor about various non-medical problems. These visits were recorded on Infirmary records as, simply, "counseling."

For purposes of this study, data of three types were recorded from the Infirmary records: (1) the number and dates of use of the Infirmary for out-patient care by the students studied, (2) the number and dates of in-patient stays, and (3) major illnesses which either were of such length or were experienced at unfortunate times so as to have probable significant effect on academic success. Since the first two of these types of data were quantitative in nature, it was possible to make some statistical analysis of their relationships to success. However, the third type of data were not analyzed statistically. A cursory examination indicates that these major illnesses were indeed quite significant in that they tend to prevent satisfactory completion of an academic program when they occur during the last few weeks of a term.

It should probably be noted that Infirmary records do not include all data pertaining to student health. Some students choose not to use Infirmary facilities when ill. They will either engage a local physician, not connected with the University, or return to their home temporarily to use the family doctor, or perhaps "treat themselves," if their complaint is minor. A high incidence of visits to the

Infirmary seems to be related to two conditions that are somewhat unusual. One of these conditions is the requirement that all freshmen men participate in military training. This training involves a weekly drill, which apparently is not enjoyed by some of the students. The Infirmary records indicate large concentration of visits from these men who desire an excuse from the doctor so that they will not be required to participate in drill.

Another phenomenon of interest is the loneliness which many students apparently feel at the University. The complaints which they register when they come to the Infirmary are not really classifiable as illness in many cases. Nevertheless, many of these students continue to come back for attention quite frequently. No attempt was made in this research to differentiate between the students who were attempting to avoid military drill, who were lonely, or who were needing medical attention. Table 26, Chapter V, illustrates the frequency of use of Infirmary facilities as well as the suggested relationship between such utilization and academic achievement.

CHAPTER V

FINDINGS OF THE STUDY

Some general facts regarding the freshman classes from which the dropouts were selected should be valuable as background information. Accordingly, the first section of this chapter will deal with the freshman classes which enrolled at the University of Florida in the autumns of 1959 and 1960.

Description of the Freshman Classes of 1959 and 1960

The 1959 entering freshman class consisted of 2,818 students, of which 1,920 (69 percent) were men and 898 (31 percent) were women. The 1960 class totaled 2,993, including 1,947 (65 percent) men and 1,046 (35 percent) women. Both classes were admitted to the University under identical admission requirements. The mean score on the Florida Twelfth Grade Testing Program for 1959 freshmen was 370; the mean for the 1960 class was also 370. (For an explanation of these tests, see the opening pages of Chapter IV.)

Students who entered as freshmen in 1959 began graduating in 1962. A total of 946 of the 1959 entrants had graduated from the University by the end of the 1965 Winter Trimester. These graduates completed their degree requirements as follows: 14 in 1962, 719 in 1963, 183 in 1964, and 30 in 1965. A total of 978 have graduated from the group of students that entered as freshmen in 1960. These graduations are distributed as follows: 129 in 1963, 700 in 1964, and 149 in 1965. Thus, 33.6 percent of the 1959 class and 32.7 percent of the 1960 class had completed their baccalaureate programs at the time this study was conducted. In addition, the University had conferred master's degrees on 46 of the 1959 freshmen and on 14 of the 1960 students.

Description of the Group Studied

The University had not maintained specific records concerning the dropout rate of the two classes involved in this study. Since it was considered desirable to have as large a group for the study as possible, the two classes were combined and the records reviewed to determine which students dropped out during their freshman years. It was found that a total of 1334 students (915 men and 419 women) dropped out, from a combined total of 5811 (both freshman classes considered). While some students may have completed one or two terms and then left while in good standing, they are not considered dropouts for purposes of this study. Considering only those students who left the University through withdrawal or suspension, "dropouts" as defined for this study, the dropout rate for the two classes was only 22.9 percent. Of this number, 377, or 28.3 percent of the dropouts, returned to the University as students at some time prior to the 1965 Spring Trimester.

The distribution of returning dropouts by year of initial registration and sex is shown in Table 4. It may be of interest to note that the two classes had been composed of over 30 percent women (31 percent in 1959 and 35 percent in 1960), but the returning dropouts were composed of only 28 percent women. There were more dropouts who came back from the 1960 class than from the 1959 class. No explanations for these differences were discovered in this study.

Table 5 summarizes the relationships between pre-dropout achievement and the number of extra-curricular activities in which the returning students engaged while in high school. It will be noted that a correlation of +.116, at a .05 level of confidence, exists between the number of high-school activities and pre-dropout achievement for men. The correlation of +.155 for women is not significant at the .05 level.

The number of high-school activities and the achievement of these same students following reentry are illustrated in Table 6. The correlation of +.178 for men is significant at the .01 level, but the correlation of -.014 for women is not significant at even the .05 level. It appears from the data presented in these tables and from the relatively insignificant correlations that there is no important relationship between numbers of high-school activities and achievement at the University for returning dropouts. This observation seems to apply to

TABLE 4

DISTRIBUTION OF RETURNING DROPOUTS, BY YEAR OF INITIAL REGISTRATION AND SEX

Year of initial registration	Men	Women	Total
1959	137	25	162
1960	157	58	215
Total	294	83	377
Percent of total freshmen:			
	5.1	1.4	6.5
Percent of total dropouts:			
	20.4	7.9	28.3
Percent of returning dropouts:			
	72.0	28.0	100.0

TABLE 5

PRE-DROPOUT GRADE-POINT AVERAGES, BY NUMBER OF HIGH-SCHOOL ACTIVITIES

Grade-point averages	Number of high-school activities ?	0	1	2	3	4	5	6	7	8	9	10	11	12	Total
4.00	..	..	..	..	..	1	..	..	..	..	..	..	..	..	1
3.50 - 3.99	..	..	..	..	..	..	..	..	..	..	..	..	..	..	...
3.00 - 3.49	..	..	..	..	..	..	1	..	..	..	..	..	..	..	1
2.50 - 2.99	..	..	..	1	1	..	..	..	..	..	..	..	..	..	2
2.00 - 2.49	1	..	..	..	8	1	..	1	..	..	..	..	..	..	11
1.50 - 1.99	1	3	2	4	3	4	4	3	..	..	..	..	..	..	24
1.00 - 1.49	1	14	6	12	20	18	10	11	5	3	1	..	2	..	103
0.50 - 0.99	2	7	7	18	15	19	14	6	1	1	..	1	..	..	91
0.00 - 0.49	1	9	14	7	9	9	5	5	..	1	1	..	..	..	61
*0.00	1	5	2	2	1	2	1	2	..	..	..	..	..	..	16
#No grades	2	14	12	10	10	12	10	6	3	1	..	1	1	1	83
Total	8	47	41	52	66	64	44	32	9	6	2	2	3	1	377
Mean	1.12	0.85	0.69	0.90	1.11	0.98	1.00	1.01	1.07	0.87	0.75	0.97	1.40	....	0.96

Coefficients of correlation are as follows: Men, + .116, significant at .05; Women, + .155, not significant at .05.

* Cases in this row are also included in the row immediately above.

Cases in this row represent students who left the University before earning any final grades.

TABLE 6

GRADE-POINT AVERAGES AFTER REENTRY, BY NUMBER OF HIGH-SCHOOL ACTIVITIES

Grade-point averages	Number of high-school activities														
	?	0	1	2	3	4	5	6	7	8	9	10	11	12	Total
4.00	..	..	1	..	..	..	..	..	..	..	..	..	..	..	1
3.50 - 3.99	..	..	..	1	..	1	..	..	..	..	..	..	..	..	2
3.00 - 3.49	1	..	..	..	1	2	2	..	..	..	..	..	..	..	6
2.50 - 2.99	1	3	1	4	7	6	2	4	..	1	1	..	1	..	31
2.00 - 2.49	1	7	6	7	15	13	10	11	2	1	..	..	1	..	74
1.50 - 1.99	1	11	10	10	17	13	8	2	3	2	..	..	..	..	77
1.00 - 1.49	1	6	7	12	11	11	4	7	2	1	..	..	..	..	62
0.50 - 0.99	..	8	5	7	5	8	6	3	1	..	1	..	..	1	45
0.00 - 0.49	1	6	4	6	5	4	8	4	..	..	..	..	..	..	38
*0.00	..	3	2	5	4	1	3	1	..	..	..	..	..	..	19
#No grades	2	6	7	5	5	6	4	1	1	1	..	2	1	..	41
Total	8	47	43	52	66	64	44	32	9	6	2	2	3	1	377
Mean	1.93	1.33	1.40	1.42	1.66	1.66	1.48	1.63	1.60	1.92	1.53	....	2.35	0.67	1.54

Coefficients of correlation are as follows: Men, + .178, significant at .01; Women, - .014, not significant at .05.

* Cases in this row are also included in the row immediately above.

Cases in this row represent students who left the University before earning any final grades.

the college record earned before dropping out as well as to the subsequent efforts.

With Table 7, a series of four tables is begun which portray the relationships existing between standardized ability/achievement tests and University achievement. Table 7 is concerned with the Florida Twelfth Grade Testing Program, Table 8 with the American Council on Education Psychological Examination, and Table 9 with the School and College Ability Test. A detailed discussion of these tests was included in Chapter IV. Table 10 shows the coefficients of correlations which were computed between these test results and the grade-point averages for the two periods of attendance. Although tables were not prepared to give detailed demonstration of the relationships between these test results and the achievement before dropout, one can see from the correlation coefficients in Table 10 that there is certainly a justification for using the results of these tests in predicting success for the freshman year. Nearly all the correlations between test scores and freshman achievement are significant at the .01 level of confidence. It is true that some of the correlations are so low that prediction would necessarily lack precision. However, the correlation coefficient of +.609 between pre-dropout grade-point average and SCAT results for the women is as high a degree of correlation as one usually finds in the investigation of predictive instruments.

TABLE 7

GRADE-POINT AVERAGES AFTER REENTRY, BY TOTAL SCORES ON FLORIDA TWELFTH GRADE TESTING PROGRAM

Grade-point averages	Florida Twelfth Grade Tests - total scores - by tenths - UF percentiles											
	00-09	10-19	20-29	30-39	40-49	50-59	60-69	70-79	80-89	90-99	Total	Mean
4.00	..	..	..	..	..	..	..	1	..	..	1	
3.50 - 3.99	..	1	..	..	..	..	..	..	..	1	2	
3.00 - 3.49	..	1	..	1	..	..	..	..	1	2	5	
2.50 - 2.99	5	2	2	5	4	3	..	3	3	3	30	
2.00 - 2.49	9	10	7	8	7	5	7	6	4	7	70	
1.50 - 1.99	14	9	12	10	7	6	7	6	1	3	75	
1.00 - 1.49	7	13	9	10	7	3	2	3	4	2	60	
0.50 - 0.99	7	8	7	7	5	1	4	..	2	1	42	
0.00 - 0.49	6	5	7	3	5	1	1	4	1	3	36	
#0.00	3	3	3	1	2	..	1	3	..	3	19	
°No grades	13	5	4	6	4	2	1	2	2	1	40	
Total	61	54	48	50	39	21	22	25	18	23	361*	39.5
Mean	1.49	1.44	1.28	1.57	1.42	1.75	1.57	1.76	1.80	1.92	1.54	

Coefficient of correlation: + .181, significant at .01 level.

Cases in this row are also included in the row immediately above.

° Cases in this row represent students who left the University before earning any final grades.

* A total of 16 persons did not take the tests and are not included in the table.

TABLE 8

GRADE-POINT AVERAGES AFTER REENTRY, BY TOTAL SCORES ON A. C. E. PSYCHOLOGICAL EXAMINATION RETURNING DROPOUTS FROM FALL 1959 FRESHMAN CLASS

Grade-point averages	A. C. E. Psychological Exam. - total scores - by tenths - UF percentiles										
	00-09	10-19	20-29	30-39	40-49	50-59	60-69	70-79	80-89	90-99	Total
4.00	..	..	..	..	..	..	..	..	1	..	1
3.50 - 3.99	..	..	..	..	..	..	..	..	..	1	1
3.00 - 3.49	..	1	1	..	..	..	..	1	1	..	4
2.50 - 2.99	1	1	..	3	..	1	..	1	2	2	11
2.00 - 2.49	3	3	4	4	3	2	..	2	3	..	24
1.50 - 1.99	4	1	6	3	3	4	4	..	2	1	28
1.00 - 1.49	8	4	1	1	2	3	2	3	1	..	25
0.50 - 0.99	5	7	2	4	3	2	1	..	..	..	24
0.00 - 0.49	3	4	3	3	1	2	1	1	1	..	19
#0.00	3	1	1	2	..	2	1	..	1	..	11
°No grades	5	3	1	2	2	2	2	2	..	1	20
Total	29	24	18	20	14	16	10	10	11	5	157*
Mean	1.20	1.20	1.48	1.38	1.37	1.34	1.21	1.82	2.20	2.75	1.45

Coefficient of correlation: + .324, significant at .01 level.

Cases in this row are also included in the row immediately above.

° Cases in this row represent students who left the University before earning any final grades.

* A total of five persons did not take the test and are not included in the table.

TABLE 9

GRADE-POINT AVERAGES AFTER REENTRY, BY TOTAL SCORES ON SCHOOL AND COLLEGE ABILITY TEST
RETURNING DROPOUTS FROM FALL 1960 FRESHMAN CLASS

Grade-point averages	School and College Ability Test - total scores - by tenths - UF percentiles										
	00-09	10-19	20-29	30-39	40-49	50-59	60-69	70-79	80-89	90-99	Total
4.00	..	..	..	..	..	..	..	..	..	..	..
3.50 - 3.99	..	..	..	..	..	..	..	..	..	..	..
3.00 - 3.49	1	..	..	..	..	..	..	..	..	1	2
2.50 - 2.99	4	2	2	2	2	1	2	2	1	1	19
2.00 - 2.49	6	7	4	9	5	5	5	2	1	4	48
1.50 - 1.99	11	7	5	8	8	2	1	4	1	..	47
1.00 - 1.49	7	9	7	5	2	1	4	..	..	1	36
0.50 - 0.99	5	5	2	1	3	..	..	..	1	..	17
0.00 - 0.49	4	3	3	2	..	1	3	1	..	1	18
#0.00	2	..	1	..	..	1	2	1	..	1	8
°No grades	6	4	2	3	3	..	..	1	..	..	19
Total	44	37	25	30	23	10	15	10	4	8	206*
Mean	1.53	1.46	1.44	1.69	1.73	1.82	1.63	1.87	1.90	1.90	1.61

Coefficient of correlation: + .157, significant at .05 level.

Cases in this row are also included in the row immediately above.

° Cases in this row represent students who left the University before earning any final grades.

* A total of 14 persons did not take the test and are not included in the table.

TABLE 10

CORRELATION COEFFICIENTS OF STANDARDIZED ABILITY AND ACHIEVEMENT TESTS WITH GRADE-POINT AVERAGES (PRE-DROPOUT AND AFTER REENTRY)

Test		Men		Women		Total	
		Pre-dropout GPA	After reentry GPA	Pre-dropout GPA	After reentry GPA	Pre-dropout GPA	After reentry GPA
FTGTP -	Psy	.274*	.127**	.330*	.132#	.288*	.129*
	Eh	.308*	.098#	.374*	.325*	.312*	.147*
	Ss	.328*	.073#	.449*	.200**	.354*	.109**
	Ns	.263*	.094#	.461*	.242**	.309*	.139*
	Ms	.281*	.160*	.469*	.054#	.323*	.130*
	Total	.396*	.150*	.548*	.067#	.436*	.181*
A C E -	Q	.220*	.192**	.148#	.436**	.189#	.250*
	L	.347*	.229*	.500*	.529*	.403*	.297*
	T	.339*	.244*	.496*	.571*	.392*	.324*
SCAT -	V	.287*	.119#	.531*	.154#	.329*	.127**
	Q	.283*	.113#	.498*	- .038#	.357*	.085#
	T	.356*	.162**	.609*	.121#	.425*	.157**

* Significant at the .01 level of confidence.

** Significant at the .05 level of confidence.

# Not significant at the .05 level of confidence.

Unfortunately, the efficiency of the tests for the prediction of success after the return of dropouts is very low. These correlations are in the range from -.038 to +.571. For men the highest coefficient is +.244. Since the great majority of the students in this study were men, the test results did not provide an encouraging solution to the problem of predicting success for the particular kind of group under consideration. However, it seems that a test such as the ACE or the SCAT would be of considerable value in a readmissions program for returning female dropouts.

The eight tables beginning with Table 11 relate to the Minnesota Multiphasic Personality Inventory (MMPI) and the grade-point averages of the group studied. For background information on the interpretation of results of the MMPI, the reader is directed to Chapter IV. It will be noted that Tables 11, 12, 13, and 14 deal with the "high point" scales of the MMPI and achievement before and after dropout. Tables 15, 16, 17, and 18 concern the "low point" scales and achievement for both periods of attendance.

For easy reference, the coefficients of correlation between these MMPI scales and achievement before and after dropout have been presented in Table 19. It is obvious from the table that the MMPI could not have been used efficiently for prediction of success of the students in the group studied.

TABLE 11

PRE-DROPOUT GRADE-POINT AVERAGES, BY MMPI HIGH-POINT SCALES
MEN

Grade-point averages	MMPI high-point scales										
	1	2	3	4	5	6	7	8	9	0	Total
4.00	..	..	..	..	..	..	..	..	..	..	..
3.50 - 3.99	..	..	..	..	..	..	..	..	..	..	..
3.00 - 3.49	..	..	..	..	..	..	..	..	1	..	1
2.50 - 2.99	..	..	1	1	..	..	..	..	..	..	2
2.00 - 2.49	..	..	..	..	1	..	2	1	2	1	7
1.50 - 1.99	1	1	..	3	3	..	3	4	3	..	18
1.00 - 1.49	1	5	5	16	9	3	7	11	24	2	83
0.50 - 0.99	..	6	6	14	4	1	6	6	28	1	72
0.00 - 0.49	2	4	1	5	4	..	4	6	15	..	41
*0.00	..	2	1	1	..	..	1	1	3	..	9
°No grades	..	2	3	15	5	1	7	6	15	..	54
Total	4	18	16	54	26	5	29	34	88	4	278#
Percentage	1.4	6.5	5.8	19.4	9.4	1.8	10.4	12.2	31.7	1.4	100.0
Mean	0.89	0.80	0.99	1.01	1.06	1.10	0.97	1.01	0.90	1.46	0.96

* Cases in this row are also included in the row immediately above.

° Cases in this row represent students who left the University before earning any final grades.

A total of 16 persons did not take the test and are not included in the table.

TABLE 12

PRE-DROPOUT GRADE-POINT AVERAGES BY MMPI HIGH-POINT SCALES
WOMEN

Grade-point averages	MMPI high-point scales 1	2	3	4	5	6	7	8	9	0	Total
4.00	..	..	..	..	..	..	..	..	1	..	1
3.50 - 3.99	..	..	..	..	..	..	..	..	..	..	..
3.00 - 3.49	..	..	..	..	..	..	..	..	..	..	..
2.50 - 2.99	..	..	..	..	..	..	..	..	..	..	..
2.00 - 2.49	..	..	2	..	..	..	..	..	..	1	3
1.50 - 1.99	..	..	..	3	1	..	..	..	..	..	4
1.00 - 1.49	..	1	..	1	1	3	5	..	5	..	16
0.50 - 0.99	..	1	3	..	1	2	1	1	5	2	16
0.00 - 0.49	..	1	1	6	..	..	1	..	7	..	16
*0.00	..	1	1	1	..	..	..	..	1	..	4
°No grades	..	1	6	3	1	2	..	2	9	1	25
Total	..	4	12	13	4	7	7	3	27	4	81#
Percentage	..	4.9	14.8	16.1	4.9	8.7	8.7	3.7	33.3	4.9	100.0
Mean	..	0.68	1.06	0.76	1.34	1.05	1.03	0.83	0.84	1.25	0.94

* Cases in this row are also included in the row immediately above.

° Cases in this row represent students who left the University before earning any final grades.

A total of two persons did not take the test and are not included in the table.

TABLE 13

GRADE-POINT AVERAGES AFTER REENTRY, BY MMPI HIGH-POINT SCALES
MEN

Grade-point averages	MMPI high-point scales 1	2	3	4	5	6	7	8	9	0	Total
4.00	..	..	..	..	..	..	..	..	..	..	..
3.50 - 3.99	..	..	..	1	..	..	..	..	..	..	1
3.00 - 3.49	..	..	..	..	1	..	..	1	1	..	3
2.50 - 2.99	..	1	..	8	6	..	2	2	5	..	24
2.00 - 2.49	1	3	3	12	7	2	6	7	17	..	58
1.50 - 1.99	1	4	4	15	4	1	8	4	18	2	61
1.00 - 1.49	2	1	2	5	2	2	5	8	19	1	47
0.50 - 0.99	..	7	5	6	1	..	2	2	9	..	32
0.00 - 0.49	..	..	..	5	4	..	3	7	6	..	25
*0.00	..	..	..	4	2	..	1	4	3	..	14
°No grades	..	2	2	2	1	..	3	3	13	1	27
Total	4	18	16	54	26	5	29	34	88	4	278#
Mean	1.70	1.38	1.37	1.66	1.80	1.80	1.61	1.35	1.53	1.55	1.57

* Cases in this row are also included in the row immediately above.

° Cases in this row represent students who left the University before earning any final grades.

A total of 16 persons did not take the test and are not included in the table.

TABLE 14

GRADE-POINT AVERAGES AFTER REENTRY, BY MMPI HIGH-POINT SCALES
WOMEN

Grade-point averages	MMPI high-point scales										
	1	2	3	4	5	6	7	8	9	0	Total
4.00	..	1	..	..	..	..	..	..	..	..	1
3.50 - 3.99	..	1	..	..	..	..	..	..	..	..	1
3.00 - 3.49	..	..	1	..	..	..	..	..	1	..	2
2.50 - 2.99	..	..	1	2	1	..	..	..	2	..	6
2.00 - 2.49	..	1	2	..	1	3	1	1	2	..	11
1.50 - 1.99	..	..	..	4	..	1	3	..	2	2	12
1.00 - 1.49	..	..	3	3	..	..	1	..	5	1	13
0.50 - 0.99	..	1	..	..	2	2	1	..	5	..	11
0.00 - 0.49	..	..	2	1	..	..	1	2	5	..	11
*0.00	..	..	1	1	..	..	..	1	1	..	4
°No grades	..	..	3	3	..	1	..	..	5	1	13
Total	..	4	12	13	4	7	7	3	27	4	81#
Mean	..	2.63	1.54	1.56	1.51	1.54	1.31	0.76	1.26	1.78	1.50

* Cases in this row are also included in the row immediately above.

° Cases in this row represent students who left the University before earning any final grades.

A total of two persons did not take the test and are not shown in the table.

TABLE 15

PRE-DROPOUT GRADE-POINT AVERAGES, BY MMPI LOW-POINT SCALES
MEN

Grade-point averages	MMPI low-point scales										
	1	2	3	4	5	6	7	8	9	0	Total
4.00	..	..	..	..	..	..	..	..	..	..	..
3.50 - 3.99	..	..	..	..	..	..	..	..	..	..	..
3.00 - 3.49	1	..	..	..	..	..	..	..	..	..	1
2.50 - 2.99	..	..	..	..	..	1	..	..	..	1	2
2.00 - 2.49	1	3	2	..	..	..	..	..	..	1	7
1.50 - 1.99	3	3	..	..	..	2	..	..	4	6	18
1.00 - 1.49	11	12	6	5	5	6	..	..	7	31	83
0.50 - 0.99	14	8	2	3	6	3	4	..	3	29	72
0.00 - 0.49	6	6	2	1	3	4	..	1	1	17	41
*0.00	2	..	..	..	1	2	..	..	..	4	9
°No grades	11	6	2	..	6	7	1	..	2	19	54
Total	47	38	14	9	20	23	5	1	17	104	278#
Mean	0.96	1.07	1.12	1.01	0.75	1.02	0.81	0.27	1.14	0.92	0.96

* Cases in this row are also included in the row immediately above.

° Cases in this row represent students who left the University before earning any final grades.

A total of 16 persons did not take the test and are not included in the table.

TABLE 16

PRE-DROPOUT GRADE-POINT AVERAGES, BY MMPI LOW-POINT SCALES
WOMEN

Grade-point averages	MMPI low-point scales 1	2	3	4	5	6	7	8	9	0	Total
4.00	..	..	..	..	..	..	..	..	..	1	1
3.50 - 3.99	..	..	..	..	..	..	..	..	..	..	..
3.00 - 3.49	..	..	..	..	..	..	..	..	..	..	..
2.50 - 2.99	..	..	..	..	..	..	..	..	..	..	..
2.00 - 2.49	..	..	..	1	..	..	..	..	1	1	3
1.50 - 1.99	..	1	..	..	2	..	..	..	..	1	4
1.00 - 1.49	1	3	..	..	4	..	1	2	..	5	16
0.50 - 0.99	3	3	..	1	7	..	1	..	..	1	16
0.00 - 0.49	1	2	..	..	3	2	1	..	1	6	16
*0.00	1	..	..	..	1	..	..	..	1	1	4
°No grades	2	3	1	..	5	4	..	..	1	9	25
Total	7	12	1	2	21	6	3	2	3	24	81#
Mean	0.67	0.92	....	1.47	0.86	0.35	0.76	1.25	1.00	1.09	0.94

* Cases in this row are also included in the row immediately above.

° Cases in this row represent students who left the University before earning any final grades.

A total of two persons did not take the test and are not included in the table.

TABLE 17

GRADE-POINT AVERAGES AFTER REENTRY, BY MMPI LOW-POINT SCALES
MEN

Grade-point averages	MMPI low-point scales 1	2	3	4	5	6	7	8	9	0	Total
4.00	..	..	..	..	..	..	..	..	..	..	..
3.50 - 3.99	..	..	..	..	..	1	..	..	..	..	1
3.00 - 3.49	1	..	..	..	1	..	..	..	..	1	3
2.50 - 2.99	6	..	1	..	..	1	1	..	1	7	17
2.00 - 2.49	9	7	1	3	4	7	1	..	3	22	57
1.50 - 1.99	8	10	5	4	7	7	2	1	3	22	69
1.00 - 1.49	11	9	3	..	1	1	..	..	3	19	47
0.50 - 0.99	4	6	2	..	4	1	1	..	4	10	32
0.00 - 0.49	4	4	1	1	1	2	..	..	2	10	25
*0.00	2	3	..	1	1	..	..	..	2	5	14
°No grades	4	2	1	1	2	3	..	..	1	13	27
Total	47	38	14	9	20	23	5	1	17	104	278#
Mean	1.65	1.50	1.49	1.69	1.55	1.82	1.73	1.87	1.30	1.52	1.57

* Cases in this row are also included in the row immediately above.

° Cases in this row represent students who left the University before earning any final grades.

A total of 16 persons did not take the test and are not included in the table.

TABLE 18

GRADE-POINT AVERAGES AFTER REENTRY, BY MMPI LOW-POINT SCALES
WOMEN

Grade-point averages	MMPI low-point scales 1	2	3	4	5	6	7	8	9	0	Total
4.00	..	..	..	..	..	..	..	..	1	..	1
3.50 - 3.99	1	..	..	..	..	..	..	..	..	..	1
3.00 - 3.49	..	..	..	..	..	..	..	..	..	2	2
2.50 - 2.99	..	1	..	1	1	1	..	..	..	4	8
2.00 - 2.49	..	1	..	1	5	..	..	1	..	2	10
1.50 - 1.99	..	2	..	..	5	1	1	1	1	1	12
1.00 - 1.49	2	2	..	..	4	..	..	..	..	5	13
0.50 - 0.99	1	3	..	..	2	2	1	..	..	2	11
0.00 - 0.49	..	..	1	..	3	1	..	..	..	6	11
*0.00	..	..	..	..	2	1	..	..	..	1	4
°No grades	3	3	..	..	1	1	1	..	1	2	12
Total	7	12	1	2	21	6	3	2	3	24	81#
Mean	1.73	1.39	0.27	2.34	1.38	1.08	1.06	1.90	2.90	1.49	1.50

* Cases in this row are also included in the row immediately above.

° Cases in this row represent students who left the University before earning any final grades.

A total of two persons did not take the test and are not included in the table.

TABLE 19

CORRELATION COEFFICIENTS OF MMPI WITH GRADE-POINT AVERAGES (PRE-DROPOUT AND AFTER REENTRY)

MMPI scales	Men		Women		Total	
	Pre-dropout GPA	After reentry GPA	Pre-dropout GPA	After reentry GPA	Pre-dropout GPA	After reentry GPA
Q	.118*	.052#	- .141#	- .139#	.081#	.024#
L	- .034#	- .054#	.203#	.016#	.025#	- .040#
F	.003#	- .031#	.095#	.084#	.026#	- .004#
K	- .117*	- .082#	.134#	.025#	- .062#	- .063#
1	- .024#	- .072#	.175#	- .014#	.026#	- .055#
2	.024#	- .038#	.043#	.081#	.030#	- .008#
3	- .046#	- .067#	.153#	- .035#	.000#	- .059#
4	.049#	- .009#	- .079#	- .175#	.019#	- .043#
5	.202**	.086#	- .139#	- .113#	.124*	.049#
6	.134*	- .055#	.116#	.040#	.129*	- .031#
7	.076#	- .050#	.045#	- .026#	.071#	- .038#
8	.046#	- .044#	.026#	- .118#	.044#	- .050#
9	.038#	.029#	- .010#	- .199*	.028#	- .022#
0	.124*	.029#	- .079#	.075#	.075#	.039#

* Significant at the .05 level of confidence.

** Significant at the .01 level of confidence.

Not significant at the .05 level of confidence.

Table 20 demonstrates the pattern of attendance of the group before they dropped out. A total of fifty-seven of the students left the University during the first semester without receiving any grades. These are represented by the group attempting zero hours. The few students who attempted less than twelve hours in their first semester were primarily a group who were dropped from one or more courses for non-attendance with failing grades assigned. These students then withdrew from the University with only the "failed" courses considered as attempted. In an effort to "correct" for the students who withdrew before receiving grades, a mean of hours attempted was computed both for official load and for load excluding the withdrawals who received no grades.

The column headed "2.5" indicates the students who were enrolled for the two semesters of the academic year plus the summer session immediately following.

Table 21 relates the achievement of the group to the number of semesters for which they were enrolled prior to leaving. The obvious impact of this table is that students tend to remain in school longer if they are finding success in their work.

The amount or frequency of counseling received by these freshmen in the University College is indicated in Table 22. As was pointed out earlier, the records covering the counseling of University College

TABLE 20

NUMBER OF HOURS ATTEMPTED (PRE-DROPOUT), BY NUMBER OF SEMESTERS ENROLLED

Number of hours attempted	Number of semesters enrolled (pre-dropout)											
	Men				Women				Total			
	1	2	2.5	Total	1	2	2.5	Total	1	2	2.5	Total
0	57	..	..	57	26	..	..	26	83	..	..	83
1	4	..	..	4	..	..	..	..	4	..	..	4
3	1	..	..	1	1	..	..	1	2	..	..	2
4	4	..	..	4	..	..	..	..	4	..	..	4
12	2	2	..	4	..	..	..	..	2	2	..	4
13	..	..	..	..	1	..	..	1	1	..	..	1
14	8	7	..	15	13	5	..	18	21	12	..	33
15	34	17	..	51	3	4	..	7	37	21	..	58
16	39	15	..	54	2	..	..	2	41	15	..	56
17	1	8	..	9	3	6	..	9	4	14	..	18
18	3	1	..	4	1	2	..	3	4	3	..	7
19	1	1	..	2	..	1	..	1	1	2	..	3
20	..	5	..	5	..	..	..	..	..	5	..	5
25	..	2	..	2	..	1	..	1	..	3	..	3
26	..	5	..	5	..	1	..	1	..	6	..	6
27	..	4	2	6	..	..	..	..	..	4	2	6
28	..	8	..	8	..	4	..	4	..	12	..	12
29	..	9	..	9	..	4	..	4	..	13	..	13
30	..	13	..	13	..	1	..	1	..	14	..	14
31	..	13	1	14	..	1	..	1	..	14	1	15
32	..	10	..	10	..	1	..	1	..	11	..	11
33	..	7	..	7	..	2	..	2	..	9	..	9
34	..	6	..	6	..	..	..	..	..	6	..	6
37	..	1	..	1	..	..	..	..	..	1	..	1
38	..	1	..	1	..	..	..	..	..	1	..	1
40	..	1	..	1	..	..	..	..	..	1	..	1
42	..	1	..	1	..	..	..	..	..	1	..	1
Total	154	137	3	294	50	33	..	83	203	170	3	377
Mean	8.98	24.58	28.33	16.45	6.88	21.97	..	12.88	8.51	24.08	28.33	15.66
Mean (Excl. 1st row)	14.26	24.58	28.33	20.41	14.33	21.97	..	18.75	14.27	24.08	28.33	20.09

TABLE 21

PRE-DROPOUT GRADE-POINT AVERAGES, BY NUMBER OF SEMESTERS ENROLLED

Grade-point averages	Number of semesters enrolled pre-dropout											
	Men				Women				Total			
	1	2	2.5	Total	1	2	2.5	Total	1	2	2.5	Total
4.00	..	..	..	..	..	1	..	1	..	1	..	1
3.50 - 3.99	..	..	..	..	..	..	..	..	..	..	..	...
3.00 - 3.49	..	1	..	1	..	..	..	..	..	1	..	1
2.50 - 2.99	..	2	..	2	..	..	..	..	..	2	..	2
2.00 - 2.49	1	7	..	8	..	3	..	3	1	10	..	11
1.50 - 1.99	2	16	2	20	1	3	..	4	3	19	2	24
1.00 - 1.49	9	76	1	86	1	16	..	17	10	92	1	103
0.50 - 0.99	40	35	..	75	6	10	..	16	46	45	..	91
0.00 - 0.49	46	..	..	46	16	..	..	16	62	..	..	62
*0.00	12	..	..	12	4	..	..	4	16	..	..	16
#No grades	57	..	..	57	26	..	..	26	83	..	..	83
Total	154	137	3	294	50	33	..	83	204	170	3	377
Mean	0.55	1.25	1.49	0.96	0.42	1.31	..	0.94	0.52	1.26	1.49	0.96

* Cases in this row are also included in the row immediately above.

# Cases in this row represent students who left the University before earning any final grades.

TABLE 22

NUMBER OF SEMESTERS ENROLLED (PRE-DROPOUT), BY NUMBER OF COUNSELING SESSIONS IN UNIVERSITY COLLEGE

Number of semesters enrolled	Number of counseling sessions in University College														
	Men					Women					Total				
	1	2	3	4	Total	1	2	3	4	Total	1	2	3	4	Total
1	141	11	2	..	154	48	2	..	..	50	189	13	2	..	204
2	...	131	6	..	137	..	31	1	1	33	...	162	7	1	170
2.5	...	...	3	..	3	..	..	..	..	..	...	...	3	..	3
Total	141	142	11	..	294	48	33	1	1	83	189	175	12	1	377

students were somewhat uncertain in that not all counseling sessions were recorded. However, the table does reveal that some of the students received more than one period of counseling per semester. In fact, a few of the students received counseling as many as three times in the one semester in which they were enrolled. Generally speaking, the students averaged only one session of counseling per semester, and that session was the one required as a part of registration.

Tables 23 and 24 show the relationships between the number of counseling sessions before dropout and the grade-point averages for the periods before dropout and after reentry. As was pointed out in the discussion of Table 21, the students tended to remain at the University longer if they were finding some success. Since the number of counseling sessions had been shown to be nearly the same as the number of semesters enrolled, there should be little surprise at finding high correlations between achievement and numbers of counseling sessions. As revealed in Table 23, there are correlations of approximately .6 between these two factors, even considering men and women separately. Caution should be exercised in attaching any predictive importance to these relationships, however. The University rules for exclusion of failing students tend to force the early departure of students whose averages are quite low. Thus, we should expect the grade-point average to show a gradual rise as we follow the progress of a given group

TABLE 23

PRE-DROPOUT GRADE-POINT AVERAGES, BY NUMBER OF UNIVERSITY COLLEGE COUNSELING SESSIONS

Pre-dropout grade-point averages	Number of University College counseling sessions												
	Men				Women				Total				
	1	2	3	4	1	2	3	4	1	2	3	4	Total
4.00	..	..	..	..	..	1	..	..	..	1	..	..	1
3.50 - 3.99	..	..	..	..	..	..	..	..	..	..	..	..	...
3.00 - 3.49	..	1	..	..	..	..	..	..	..	1	..	..	1
2.50 - 2.99	..	1	1	..	..	..	..	..	..	1	1	..	2
2.00 - 2.49	1	7	..	..	..	2	..	1	1	9	..	1	11
1.50 - 1.99	1	17	2	..	1	2	1	..	2	19	3	..	24
1.00 - 1.49	9	73	4	..	1	16	..	..	10	89	4	..	103
0.50 - 0.99	37	36	2	..	6	10	..	..	43	46	2	..	91
0.00 - 0.49	42	2	1	..	15	1	..	..	57	3	1	..	61
*0.00	12	..	..	..	4	..	..	..	16	..	..	..	16
#No grades	51	5	1	..	25	1	..	..	76	6	1	..	83
Total	141	142	11	..	48	33	1	1	189	175	12	1	377
Mean	0.53	1.22	1.28	..	0.43	1.23	1.86	2.47	0.51	1.22	1.34	2.47	0.96

Coefficients of correlation are as follows: Men, + .578; Women, + .645; Total, + .593 — all significant at the .01 level of confidence.

* Cases in this row are also included in the row immediately above.

Cases in this row represent students who left the University before earning any final grades.

through their University careers.

Table 24 may suggest some value for prediction in the number of counseling sessions or number of semesters attended prior to dropout. This table shows the distribution of grade-point averages following reentry, by number of counseling sessions before dropout. As indicated above, the number of counseling sessions is practically equivalent to number of semesters attended. The coefficients of correlation indicate a moderate relationship which might offer some help in predicting success after reentry. Of course, the fact that students who did better in their work before dropout tended to do better after return is one which is consistent with earlier research. The best single predictor of freshman success has been found to be the achievement record in high school. It should not be surprising to find a relationship between freshman success and success after reentry, even though the relationship suggested in Table 24 is not of great magnitude.

Table 25 was constructed to demonstrate any relationship between out-patient visits to the University Infirmary and academic success before dropout. Although it seems that there may be some relationship, no significant correlation was detectable by the method used in this study. Perhaps the only implication justified from these data is that students who made use of the out-patient services of the Infirmary tended to have higher averages than those who did not. This empirical

TABLE 24

GRADE-POINT AVERAGES AFTER REENTRY, BY NUMBER OF PRE-DROPOUT COUNSELING SESSIONS IN UNIVERSITY COLLEGE

Grade-point averages	Number of pre-dropout counseling sessions in University College														
	Men					Women					Total				
	1	2	3	4	Total	1	2	3	4	Total	1	2	3	4	Total
4.00	..	..	..	..	..	1	..	..	..	1	1	..	..	..	1
3.50 - 3.99	..	1	..	..	1	..	1	..	..	1	..	2	..	..	2
3.00 - 3.49	1	3	..	..	4	..	1	..	1	2	1	4	..	1	6
2.50 - 2.99	6	16	2	..	24	3	3	1	..	7	9	19	3	..	31
2.00 - 2.49	23	38	1	..	62	6	6	..	..	12	29	44	1	..	74
1.50 - 1.99	28	33	3	..	64	3	10	..	..	13	31	43	3	..	77
1.00 - 1.49	30	18	1	..	49	10	3	..	..	13	40	21	1	..	62
0.50 - 0.99	24	10	..	..	34	7	4	..	..	11	31	14	..	..	45
0.00 - 0.49	14	12	1	..	27	9	2	..	..	11	23	14	1	..	38
*0.00	9	6	..	..	15	3	1	..	..	4	12	7	..	..	19
#No grades	15	11	3	..	29	9	3	..	..	12	24	14	3	..	41
Total	141	142	11	..	294	48	33	1	1	83	189	175	12	1	377
Mean	1.35	1.74	1.78	..	1.55	1.23	1.73	2.76	3.08	1.49	1.32	1.74	1.89	3.08	1.54

Coefficients of correlation are as follows: Men, + .248; Women, + .360; Total, + .273 — all significant at the .01 level of confidence.

* Cases in this row are also included in the row immediately above.

Cases in this row represent students who left the University before earning any final grades.

TABLE 25

PRE-DROPOUT GRADE-POINT AVERAGES, BY NUMBER OF VISITS TO INFIRMARY AS OUT-PATIENTS

Grade-point averages	Number of visits to infirmary as out-patients																	
	Men						Women						Total					
	0	1-5	6-10	11-15	Over 15	Tot.	0	1-5	6-10	11-15	Over 15	Tot.	0	1-5	6-10	11-15	Over 15	Total
4.00	..	..	..	..	..	..	..	1	..	..	..	1	..	1	..	..	..	1
3.50 - 3.99	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	...
3.00 - 3.49	..	1	..	..	..	1	..	..	..	..	..	..	..	1	..	..	..	1
2.50 - 2.99	1	1	..	..	..	2	..	..	..	..	..	..	1	1	..	..	..	2
2.00 - 2.49	1	7	..	..	..	8	..	1	2	..	..	3	1	8	2	..	..	11
1.50 - 1.99	2	14	3	..	1	20	1	2	1	..	..	4	3	16	4	..	1	24
1.00 - 1.49	17	46	14	6	3	86	2	9	3	1	2	17	19	55	17	7	5	103
0.50 - 0.99	23	40	6	3	3	75	3	10	2	1	..	16	26	50	8	4	3	91
0.00 - 0.49	18	22	3	2	..	45	13	3	..	..	..	16	31	25	3	2	..	61
*0.00	6	4	2	..	..	12	4	..	..	..	..	4	10	4	2	..	..	16
#No grades	12	36	6	1	2	57	6	18	2	..	..	26	18	54	8	1	2	83
Total	74	167	32	12	9	294	25	44	10	2	2	83	99	211	42	14	11	377
Mean	0.79	1.03	1.06	0.84	1.06	0.96	0.50	1.08	1.42	1.12	1.23	0.94	0.72	1.04	1.14	0.88	1.10	0.96

Coefficients of correlation are as follows: Men, - .020; Women, + .157; Total, + .024 — none significant at the .05 level of confidence.

* Cases in this row are also included in the row immediately above.

Cases in this row represent students who left the University before earning any final grades.

TABLE 26

GRADE-POINT AVERAGES AFTER REENTRY, BY NUMBER OF PRE-DROPOUT VISITS TO INFIRMARY AS OUT-PATIENTS

Grade-point averages	Number of pre-dropout visits to infirmary as out-patients																	
	Men						Women						Total					
	0	1-5	6-10	11-15	Over 15	Tot.	0	1-5	6-10	11-15	Over 15	Tot.	0	1-5	6-10	11-15	Over 15	Total
4.00	..	..	..	..	..	..	1	..	..	..	..	1	1	..	..	..	..	1
3.50 - 3.99	1	..	..	..	..	1	..	..	..	1	..	1	1	..	..	1	..	2
3.00 - 3.49	1	3	..	..	..	4	..	1	1	..	..	2	1	1	4	1	..	6
2.50 - 2.99	4	14	5	1	..	24	2	2	2	..	1	7	6	16	7	1	1	31
2.00 - 2.49	15	37	5	2	3	62	4	6	2	..	..	12	19	43	7	2	3	74
1.50 - 1.99	14	37	8	4	1	64	3	8	1	1	..	13	17	45	9	5	1	77
1.00 - 1.49	14	26	4	2	3	49	5	7	1	..	..	13	19	33	5	2	3	62
0.50 - 0.99	8	20	5	1	..	34	2	7	1	..	1	11	10	27	6	1	1	45
0.00 - 0.49	9	14	2	1	1	27	4	6	1	..	..	11	13	20	3	1	1	38
*0.00	6	8	1	..	..	15	..	3	1	..	..	4	6	11	2	..	..	19
#No grades	8	16	3	1	1	29	4	7	1	..	..	12	12	23	4	1	1	41
Total	74	167	32	12	9	294	25	44	10	2	2	83	99	211	42	14	11	377
Mean	1.47	1.58	1.62	1.59	1.55	1.55	1.51	1.32	1.84	2.77	1.57	1.49	1.48	1.53	1.67	1.77	1.55	1.54

Coefficients of correlation are as follows: Men, + .049; Women, + .118; Total, + .066 — none significant at the .05 level of confidence.

* Cases in this row are also included in the row immediately above.

# Cases in this row represent students who left the University before earning any final grades.

relationship tends to evaporate, however, when one realizes that students who remained at the University for longer periods of time would be more likely to have used the Infirmary services, and these are the students shown earlier to have higher averages. Table 26 gives support to the conclusion that there is no predictive value to utilization of Infirmary out-patient services.

Table 27 relates the type of termination which ended the first period of attendance with the status or type of termination at the end of the second period. It will be noted, first of all, that the students dropped out initially for academic reasons in well over half the cases. Although withdrawing students gave almost countless reasons for their voluntary withdrawals, the fact that they all withdrew quite late in the semester indicated that they too were probably experiencing academic difficulty in the majority of cases. More than a third of the initial withdrawals were eventually suspended for academic reasons after they reentered. The later success of the group of withdrawn men is less than that of men who were initially suspended for one semester, graduation taken as the criterion for success. The opposite is true for the women. It would seem from this table that the type of initial termination does not give much insight into the chances for success after reentry.

The factors appearing prior to the students dropout are perhaps

TABLE 27

TYPE OF INITIAL TERMINATION, BY TYPE OF FINAL TERMINATION OR STATUS

Type of initial termination	Type of final termination or status																						Total
	Men											Women											
	C	D	E	G	N	S	W	X	1	4	6	C	D	E	G	N	S	W	X	1	4	6	
D	..	..	1	1	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	3
S	..	..	9	3	2	27	3	..	..	..	..	..	..	1	2	..	2	2	..	..	..	..	51
W	2	1	8	9	7	51	30	1	2	1	..	..	..	..	6	7	19	12	..	..	..	..	156
1	2	..	14	12	16	69	18	..	..	2	2	..	..	1	2	4	17	8	..	..	..	..	167
Total	4	1	32	25	26	147	51	1	2	3	2	..	..	2	10	11	38	22	..	..	..	..	377

Key to abbreviations and symbols:

C - Transferred to another college.
D - Suspended from the University for disciplinary reasons.
E - Enrolled at the University for the 1965 Winter Trimester.
G - Graduated from the University with a baccalaureate degree.
N - Completed at least one semester in good standing, but left for no stated reason.
S - Suspended for academic reasons, not eligible for readmission without petition.
W - Withdrew from the University.
X - Attends the University intermittently as a Cooperative Engineering student.
1 - Suspended for one semester for academic reasons.
4 - Not permitted to continue, 48 semester hour rule.
6 - Not permitted to continue, 86 semester hour rule.

best summarized in the grade-point averages earned during that period. These averages, and their relationship to subsequent achievement, are set forth in Table 28. It will be noted that a coefficient of correlation of +.340, at the .01 level of confidence, was obtained when these two factors were compared. Not shown, but also computed, were the coefficients for men and women separately. At the .01 level of confidence, the coefficient for men was +.325 and for women, +.383.

Table 29 may be considered parallel to Table 21. Both of these tables illustrate the fact that grade-point averages tended to be higher for groups that remained in school longer. The relatively high correlation (+.580) should be interpreted simply as evidence that students who are successful are inclined to remain enrolled. An interpretation that students tend to do better in their work if they persist over a long period of time would not necessarily be justified from this correlation.

Table 30, parallel to Table 22, indicates that students tended to receive about one session of counseling in the University College for each semester enrolled after reentry. Of course, some of these students reentered as transfer students in the upper division. Therefore, this table could be misleading if it were interpreted as accounting for all counseling afforded the returning dropouts.

Table 31, similar in content to Table 27, shows the status of the returning dropouts at the time of this study, by type of termin-

TABLE 28

GRADE-POINT AVERAGES AFTER REENTRY, BY PRE-DROPOUT GRADE-POINT AVERAGES

GPA's after reentry	No Grades*	0.00#	0.00–0.49	0.50–0.99	1.00–1.49	1.50–1.99	2.00–2.49	2.50–2.99	3.00–3.49	3.50–3.99	4.00	Total	Mean
		Pre-dropout grade-point averages											
4.00	..	1	1	..	..	..	..	..	..	..	..	1	0.00
3.50 - 3.99	..	..	..	..	1	..	..	1	..	..	..	2	2.10
3.00 - 3.49	..	1	1	1	..	1	1	..	1	..	1	6	2.03
2.50 - 2.99	3	..	1	10	9	5	3	..	..	..	..	31	1.23
2.00 - 2.49	12	3	8	17	26	7	4	..	..	..	..	74	1.07
1.50 - 1.99	14	3	10	20	27	2	3	1	..	..	..	77	0.99
1.00 - 1.49	10	2	19	12	19	2	..	..	..	..	..	62	0.75
0.50 - 0.99	14	1	8	15	6	2	..	..	..	..	..	45	0.74
0.00 - 0.49	14	2	7	5	9	3	..	..	..	..	..	38	0.87
##0.00	8	1	3	1	4	3	..	..	..	..	..	19	0.96
**No grades	16	3	6	11	6	2	..	..	..	..	..	41	0.78
Total	83	16	61	91	103	24	11	2	1	..	1	377	0.97
Mean	1.20	1.74	1.31	1.56	1.69	1.86	2.20	2.74	3.21	...	3.40	1.63	

Coefficient of correlation: + .340, at the .01 level of confidence.

* Cases in this column represent students who did not earn any final grades before leaving the University.
# Cases in this column are also included in the adjacent column to the right.
## Cases in this row are also included in the row immediately above.
** Cases in this row represent students who did not earn any final grades during the period after reentry.

TABLE 29

GRADE-POINT AVERAGES AFTER REENTRY, BY NUMBER OF SEMESTERS ENROLLED AFTER REENTRY

GPA's after reentry	Number of semesters enrolled after reentry*																						
	0.5	1.0	1.5	2.0	2.5	3.0	3.5	4.0	4.5	5.0	5.5	6.0	6.5	7.0	7.5	8.0	8.5	9.0	9.5	10.0	10.5	Above#	Total
4.00	..	..	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1
3.50–3.99	..	..	..	1	..	..	..	..	..	1	..	..	..	..	..	..	..	..	..	..	..	..	2
3.00–3.49	..	1	..	2	1	..	..	..	1	..	..	..	..	..	1	..	..	..	..	..	..	..	6
2.50–2.99	..	3	1	2	1	2	1	1	1	3	1	1	2	3	1	4	1	..	1	1	1	..	31
2.00–2.49	5	4	5	10	1	7	..	6	1	4	2	2	1	3	5	4	4	4	2	1	1	2	74
1.50–1.99	1	29	8	9	4	4	6	9	1	1	1	3	..	..	1	..	..	..	..	..	..	..	77
1.00–1.49	4	32	14	8	..	3	..	..	1	..	..	..	..	..	..	..	..	..	..	..	..	..	62
0.50–0.99	2	34	9	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	45
0.00–0.49	4	28	3	2	..	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	38
°0.00	2	14	1	1	..	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	19
!No grades	1	37	..	1	..	1	..	..	..	1	..	..	..	..	..	..	..	..	..	..	..	..	41
Total	17	168	41	35	7	18	7	16	5	10	4	6	3	6	8	8	5	4	3	2	2	2	377
Mean	1.12	1.02	1.32	1.83	2.08	1.85	1.89	1.97	2.30	2.54	2.23	2.08	2.85	2.55	2.33	2.49	2.36	2.25	2.41	2.52	2.29	2.22	1.54

Coefficient of correlation: + .580, at the .01 level of confidence.

* Summer terms are designated as 0.5 semesters.

# Two students were enrolled respectively for 11.5 and 12.0 semesters.

° Cases in this row are also included in the row immediately above.

! Cases in this row represent students who left the University before earning any final grades.

TABLE 30

NUMBER OF COUNSELING SESSIONS IN UNIVERSITY COLLEGE, BY NUMBER OF SEMESTERS ENROLLED AFTER REENTRY

No. of U.C. counseling sessions	Number of semesters enrolled after reentry*																						
	0.5	1.0	1.5	2.0	2.5	3.0	3.5	4.0	4.5	5.0	5.5	6.0	6.5	7.0	7.5	8.0	8.5	9.0	9.5	10.0	10.5	Above#	Tot.
0	..	6	..	3	..	2	1	2	..	3	..	..	..	..	..	..	..	..	..	..	..	..	17
1	17	146	..	1	1	..	..	1	2	1	..	1	..	..	..	..	..	..	..	..	..	..	170
2	..	14	36	21	..	..	1	..	..	1	..	..	1	..	..	..	..	..	..	..	..	..	74
3	..	2	4	3	4	11	..	3	1	..	1	..	..	3	2	3	..	1	1	..	..	..	39
4	..	..	..	6	1	3	5	4	1	1	1	3	1	2	3	1	2	..	1	..	..	1	36
5	..	..	1	..	1	1	..	3	1	3	..	..	..	..	..	3	2	1	1	1	1	..	19
6	..	..	..	1	..	..	..	..	..	1	..	..	..	..	..	..	..	1	..	..	..	..	3
7	..	..	..	..	..	1	..	3	..	..	..	..	..	..	1	1	..	1	..	1	1	1	10
8	..	..	..	..	..	..	..	..	..	..	2	1	..	1	1	..	..	..	..	..	..	..	5
9	..	..	..	..	..	..	..	..	..	..	..	..	1	..	..	..	..	..	..	..	..	..	1
10	..	..	..	..	..	..	..	..	..	..	..	1	..	..	1	..	..	..	..	..	..	..	2
11	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
12	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	..	..	..	..	..	1
Total	17	168	41	35	7	18	7	16	5	10	4	6	3	6	8	8	5	4	3	2	2	2	377

* Summer terms are designated as 0.5 semesters.

Two students were enrolled respectively for 11.5 and 12.0 semesters.

TABLE 31

TYPE OF FINAL TERMINATION OR STATUS, BY TYPE OF INITIAL TERMINATION

Final termination or status	Type of initial termination														
	Men					Women					Total				
	D	S	W	1	Total	D	S	W	1	Total	D	S	W	1	Total
C	..	..	2	2	4	..	..	..	..	..	..	..	2	2	4
D	..	..	1	..	1	..	..	..	..	..	..	..	1	1	1
E	1	9	8	14	32	..	1	..	1	2	1	10	8	15	34
G	1	3	9	12	25	..	2	6	2	10	1	5	15	14	35
N	1	2	7	16	26	..	..	7	4	11	1	2	14	20	37
S	..	27	51	69	147	..	2	19	17	38	..	29	70	86	185
W	..	3	30	18	51	..	2	12	8	22	..	5	42	26	73
X	..	..	1	..	1	..	..	..	..	..	..	..	1	..	1
1	..	..	2	..	2	..	..	..	..	..	..	..	2	..	2
4	..	..	1	2	3	..	..	..	..	..	..	..	1	2	3
6	..	..	..	2	2	..	..	..	..	..	..	..	..	2	2
Total	3	44	112	135	294	..	7	44	32	83	3	51	156	167	377

Key to abbreviations and symbols:

C - Transferred to another college.
D - Suspended from the University for disciplinary reasons.
E - Enrolled at the University for the 1965 Winter Trimester.
G - Graduated from the University with a baccalaureate degree.
N - Completed at least one semester in good standing, but left for no stated reason.
S - Suspended for academic reasons, not eligible for readmission.
W - Withdrew from the University.
X - Attends the University intermittently as a Cooperative Engineering student.
1 - Suspended for one semester for academic reasons.
4 - Not permitted to continue, 48 semester-hour rule.
6 - Not permitted to continue, 86 semester-hour rule.

ation which ended their initial period of attendance. If one were to consider the groups of students who ultimately withdrew, left(no explained reason) and were excluded or suspended as "unsuccessful," there would be no question that the great majority of the returning dropouts were unsuccessful. Of course, those who were graduated must be considered successful. These account for thirty-five people, or about 9 percent of the returning dropouts. If the students who were still enrolled at the time of this study were considered "successful," in the sense that they may be presumed to be making satisfactory progress toward graduation, an additional thirty-four students (another 9 percent) can be added to the "successful" group. Therefore, it is probably accurate to say that approximately 18 percent of the returning dropouts appeared "successful" at the time this study was conducted. When analyzed according to sex, these data reveal a "success" rate of about 19 percent for men, but only 14 percent for women.

Comparisons Among Sub-groups

Tables 32, 33, and 34 describe the returning dropouts who graduated. As expected, there were more graduates from the 1959 class than from the 1960 class. This difference can be attributed to the fact that the 1959 entrants had had one more year to complete their work than had the 1960 freshmen. However, this explanation will not coincide with the fact that there was only one women graduating from the

TABLE 32

DISTRIBUTION OF GRADUATES, BY YEAR OF INITIAL REGISTRATION AND SEX

Year of initial registration	Men	Women	Total
1959	15	1	16
1960	10	9	19
Total	25	10	35
Percent of returnees	6.6	2.7	9.3

1959 class, and nine women from the 1960 class. Perhaps the difference is attributable simply to chance.

Table 33 shows that eight persons graduated within four calendar years after beginning their college careers. This fact is somewhat remarkable when one remembers that the group of students under study is characterized generally by scholastic difficulty. The number of students graduating from the group hit its peak in April, 1965, the last graduating period considered in this study. It would be interesting to follow the remaining students for a year or two to see how many more graduate within the near future.

Table 34 shows a comparison between graduates and non-graduates on the Florida Twelfth Grade Testing Program. Since there are so few graduates, it would be dangerous to draw implications which overemphasize the facts shown herein. For example, it is apparent that the majority of the women who graduated had scores on the test which were definitely lower than the average for non-graduate women. The data as presented suggested a negative correlation between the test results and chances for graduation among women. However, the numbers are so few and the means for the two groups are so nearly the same that such a correlation would have no significance.

Tables 35, 36, and 37 concern students who were affiliated with fraternities or sororities compared with those who were not. Comparative scores on the Florida Twelfth Grade Testing Program are shown in

TABLE 33

GRADUATES, BY MONTH AND YEAR OF GRADUATION

Month and year of initial registration	Men							Women							Total						
	mo. and yr. of graduation							mo. and yr. of graduation							mo. and yr. of graduation						
	Aug '63	Dec '63	Apr '64	Jun '64	Aug '64	Dec '64	Apr '65	Aug '63	Dec '63	Apr '64	Jun '64	Aug '64	Dec '64	Apr '65	Aug '63	Dec '63	Apr '64	Jun '64	Aug '64	Dec '64	Apr '65
September, 1959	..	3	4	1	1	4	2	1	.	.	.	.	.	.	1	3	4	1	1	4	2
September, 1960	..	.	2	.	1	2	5	.	1	2	1	.	.	5	.	1	4	1	1	2	10
Total	..	3	6	1	2	6	7	1	1	2	1	.	.	5	1	4	8	2	2	6	12

TABLE 34

GRADUATES AND NON-GRADUATES, BY TOTAL SCORES ON FLORIDA TWELFTH GRADE TESTING PROGRAM

Graduation status		Total scores on FTGTP, by tenths, UF percentiles													
		00-09	10-19	20-29	30-39	40-49	50-59	60-69	70-79	80-89	90-99	No scores	Mean score	Total	%
Men	Graduates	2	4	2	5	..	..	3	4	3	2	..	49.9	25	8.5
	Non-graduates	33	35	38	37	33	18	16	16	12	17	14	40.1	269	91.5
Women	Graduates	6	1	..	2	..	..	..	..	..	1	..	20.2	10	12.0
	Non-graduates	20	14	8	6	6	3	3	5	3	3	2	31.1	73	88.0
Total	Graduates	8	5	2	7	..	..	3	4	3	3	..	41.1	35	9.3
	Non-graduates	53	49	46	43	39	21	19	21	15	20	16	38.2	342	90.7
	Total	61	54	48	50	39	21	22	25	18	23	16	38.4	377	100.0

TABLE 35

PARTICIPATION AND NON-PARTICIPATION IN FRATERNITY/SORORITY, BY TOTAL SCORES ON FLORIDA TWELFTH GRADE TESTING PROGRAM

Participation status	Total scores on FTGTP, by tenths, UF percentiles																									
	Men												Women													
	Low	2	3	4	5	6	7	8	9	Hi	Tot	Mean	Low	2	3	4	5	6	7	8	9	Hi	Tot	Mean	Total	Mean
Pledges	6	7	13	18	18	9	7	7	4	9	98	46.9*	3	2	.	4	.	1	1	1	1	.	13	34.4	111	45.4
Non-pledges	29	32	27	24	15	9	12	13	11	10	182	37.8*	23	13	8	4	6	2	2	4	2	4	68	28.9	250	35.4
Total	35	39	40	42	33	18	19	20	15	19	280	41.0	26	15	8	8	6	3	3	5	3	4	81	29.8	361**	38.4

* Difference significant at .02 level.

** A total of 16 persons (14 men and 2 women) did not take the tests and are not included in the table.

Table 35. The average score for students who pledged fraternities or sororities in the freshman year was higher than the average score for "independents," with the difference significant at the .02 level for men. One factor which contributed to this difference is the policy of these social organizations to select their new members partly on the basis of the test results. The minimum score for a young man's consideration for membership in a fraternity was several points higher than the minimum score required for admission to the University.

The rather slight difference in academic preparation for college revealed in Table 35 may suggest an explanation for the differences in freshman achievement portrayed in Table 36. The differences in achievement are also so slight that there is no significance to these differences, statistically.

Since so many of the students were unable to continue in the social organization following reentry, the tables were constructed to show the distribution of averages on the basis of fraternity and sorority affiliation _before_ dropping out. This method of presentation makes Tables 36 and 37 parallel with the only difference being the period for which the grade-point averages are distributed.

There is a much wider difference between "independents" and fraternity men and sorority women, when the grade-point average following reentry is considered. Even so, the difference in means are not

TABLE 36

PRE-DROPOUT GRADE-POINT AVERAGES, BY FRATERNITY/SORORITY AFFILIATION BEFORE INITIAL TERMINATION

Grade-point average	Fraternity men	Non-fraternity men	Total	Sorority women	Non-sorority women	Total
4.00	..	..	..	..	1	1
3.50 - 3.99	..	..	..	..	..	..
3.00 - 3.49	1	..	1	..	..	..
2.50 - 2.99	2	..	2	..	..	..
2.00 - 2.49	4	4	8	1	2	3
1.50 - 1.99	8	12	20	..	4	4
1.00 - 1.49	30	56	86	3	14	17
0.50 - 0.99	15	60	75	2	14	16
0.00 - 0.49	17	28	45	2	14	16
0.00*	7	5	12	1	3	4
No grades#	23	34	57	6	20	26
Total	100	194	294	14	69	83
Mean	1.05	0.92	0.96	0.96	0.94	0.94

* Cases in this row are also included in the row immediately above.

Cases in this row represent students who left the University before earning any final grades.

TABLE 37

GRADE-POINT AVERAGES AFTER REENTRY, BY FRATERNITY/SORORITY AFFILIATION BEFORE INITIAL TERMINATION

Grade-point average	Fraternity men	Non-fraternity men	Total	Sorority women	Non-sorority women	Total
4.00	..	..	..	..	1	1
3.50 - 3.99	1	..	1	..	1	1
3.00 - 3.49	1	3	4	..	2	2
2.50 - 2.99	6	18	24	1	6	7
2.00 - 2.49	26	36	62	4	8	12
1.50 - 1.99	18	46	64	1	12	13
1.00 - 1.49	18	31	49	3	10	13
0.50 - 0.99	13	21	34	.	11	11
0.00 - 0.49	6	21	27	1	10	11
0.00*	3	12	15	.	4	4
No grades#	11	18	29	4	8	12
Total	100	194	294	14	69	83
Mean	1.60	1.53	1.55	1.69	1.46	1.49

* Cases in this row are also included in the row immediately above.

# Cases in this row represent students who left the University before earning any final grades.

high enough to be statistically significant.

Tables 38 and 39 show distributions of the grade-point averages for the two periods of University attendance, by major fields of study at the time of initial registration. The tables show clearly that student achievement improved in almost all the groups subdivided by major field. The major fields showing averages considerably different from the average of the total group had so few students enrolled that no significance can properly be attached to the differences.

There were very few students reported as having received counseling in the offices of the Deans of Men, Women, and Student Affairs. The total number of such students and their achievement records following reentry are presented in Table 40. The mean grade-point average for the counseled students was higher than for the group as a whole. However, there were relatively so few cases in the counseled group that no significance should be attached to the difference.

Table 41 reveals that the utilization of various clinical services at the University was so slight that inferences concerning the benefits of their use would be without foundation. Perhaps the main conclusion to be reached from this table is that the students in this study did not avail themselves of the clinical assistance available to them. It may be of some significance that the men who made use of the Reading Clinic received on the average the same grades as the total

TABLE 38

PRE-DROPOUT GRADE-POINT AVERAGES, BY MAJOR FIELD OF STUDY AT TIME OF FIRST ADMISSION

Major field	No grades*	0.00#	0.00 0.49	0.50 0.99	1.00 1.49	1.50 1.99	2.00 2.49	2.50 2.99	3.00 3.49	3.50 3.99	4.00	Total	Mean
Accounting	1	1	1	1	..	..	..	..	..	..	..	3	0.48
Advertising	..	..	2	..	..	..	..	..	..	..	..	2	0.10
Aero. Engr.	2	1	1	2	1	1	..	..	..	..	..	7	0.86
Agric. Engr.	2	..	3	2	3	..	..	..	.	..	..	10	0.78
Anim. Husb.	..	..	..	1	..	..	..	..	..	..	..	1	0.79
Architec.	1	..	3	5	4	..	1	..	..	..	..	14	0.93
Art	..	..	..	1	..	..	..	..	..	..	..	1	0.69
Biology	2	..	..	..	..	..	..	..	..	..	..	2	....
Bus. Admin.	10	1	4	12	8	1	1	..	..	..	..	36	0.87
Bus. Educ.	..	..	..	..	1	..	..	..	..	..	..	1	1.35
Chem. Engr.	1	..	..	1	3	..	..	..	..	..	..	5	0.99
Chemistry	..	..	..	..	1	..	1	..	..	..	..	2	1.53
Civil Engr.	3	..	2	3	4	1	1	..	..	..	..	14	1.02
Educ., Gen.	5	..	5	3	4	1	1	..	..	..	..	19	0.92
Ed., Elem.	2	..	..	4	1	..	..	..	..	..	..	7	0.78
Ed., Sec.	2	..	1	1	1	..	..	..	..	..	..	5	0.76
Ed., VO-Ag.	..	..	..	..	2	..	..	..	..	..	..	2	1.20
Engr., Gen.	2	1	5	11	12	1	2	..	..	..	..	33	0.96
Elec. Engr.	5	..	1	1	7	10	2	1	1	..	..	27	1.13
Fin. & Ins.	..	..	..	1	1	..	..	1	..	..	..	3	0.76
For. Lang.	1	..	..	..	..	..	..	..	..	..	..	1	....
Forestry	..	..	1	..	..	.	..	..	..	..	..	1	0.38
Fruit Crops	..	..	..	..	1	..	..	..	..	..	..	1	1.15
Indus. Eng.	1	..	..	..	1	1	..	..	..	..	..	3	1.49
Inter. Des.	..	..	2	1	1	..	..	..	..	..	..	4	0.69
Journalism	1	..	..	..	..	..	..	..	..	..	..	1	....
Land. Arch.	..	..	..	1	..	..	..	..	..	..	..	1	0.75

TABLE 38 (continued)

Major field	No grades*	0.00#	0.00 0.49	0.50 0.99	1.00 1.49	1.50 1.99	2.00 2.49	2.50 2.99	3.00 3.49	3.50 3.99	4.00	Total	Mean
Management	..	..	1	1	2	..	..	..	..	..	..	4	0.94
Marketing	..	1	1	..	1	1	..	..	..	..	..	3	0.98
Mathematics	..	..	..	..	2	1	..	..	1	..	..	4	1.84
Mech. Engr.	2	..	..	2	4	2	..	..	..	..	..	10	1.24
Music	..	1	1	..	2	1	..	..	..	..	..	4	1.00
Nursing	3	..	..	2	..	..	1	..	..	..	1	7	1.86
Pharmacy	2	1	1	3	2	..	..	..	..	..	..	8	0.84
Philosophy	..	..	1	..	..	..	..	..	..	..	..	1	0.33
Phys. Ther.	1	..	..	..	..	..	..	..	..	..	..	1	....
Physics	..	..	1	..	..	..	..	..	..	..	..	1	2.88
Pol. Sci.	..	..	..	1	..	..	..	..	..	..	..	1	0.79
Pre-dental	1	..	2	5	..	..	..	..	..	..	..	8	0.62
Pre-law	5	1	3	4	4	1	1	..	..	..	..	18	0.91
Pre-medical	8	2	4	8	8	3	..	..	..	..	..	31	0.93
Pre-vet. med.	..	1	2	2	2	..	..	..	..	..	..	6	0.69
Psychology	2	..	..	..	3	..	..	..	..	..	..	5	1.35
Sociology	3	..	..	1	2	..	..	..	..	..	..	6	1.08
Speech	1	..	..	..	..	..	..	..	..	..	..	1	....
None stated	15	5	13	5	12	7	1	..	..	..	..	53	0.90
Total	83	16	61	91	103	24	11	2	1	..	1	377	0.96

* Cases in this column represent students who did not earn any final grades before leaving the University.

Cases in this column are also included in the adjacent column to the right.

TABLE 39

GRADE-POINT AVERAGES AFTER REENTRY, BY MAJOR FIELD OF STUDY AT TIME OF FIRST ADMISSION

Major field	No grades*	0.00#	0.00 0.49	0.50 0.99	1.00 1.49	1.50 1.99	2.00 2.49	2.50 2.99	3.00 3.49	3.50 3.99	4.00	Total	Mean
Accounting	1	..	..	..	..	1	1	..	..	..	..	3	1.97
Advertising	..	..	1	..	1	..	..	..	..	..	..	2	0.59
Aero. Engr.	1	..	..	1	..	1	3	1	..	..	..	7	1.90
Agric. Eng.	..	2	2	1	2	4	..	1	..	..	..	10	1.30
Anim. Husb.	..	..	..	..	..	1	..	..	..	..	..	1	1.83
Architec.	2	..	2	1	3	3	3	..	..	..	..	14	1.40
Art	..	..	..	..	1	..	..	..	..	..	..	1	1.07
Biology	1	..	..	1	..	..	..	..	..	..	..	2	0.50
Bus. Admin.	2	1	1	11	9	2	9	2	..	..	..	36	1.38
Bus. Educ.	..	..	..	..	..	..	1	..	..	..	..	1	2.00
Chem. Engr.	..	1	1	..	2	..	2	..	..	..	..	5	1.31
Chemistry	..	..	..	..	1	..	..	1	..	..	..	2	1.96
Civil Engr.	2	1	1	2	2	4	2	1	..	..	..	14	1.43
Educ., Gen.	2	1	2	3	5	4	1	1	1	..	..	19	1.33
Ed., Elem.	2	..	..	1	1	1	1	1	..	..	..	7	1.71
Ed., Sec.	3	..	1	..	..	..	..	1	..	..	..	5	1.99
Ed., Vo-Ag	..	1	..	..	..	1	..	..	..	..	..	2	0.93
Engr., Gen.	2	1	3	5	3	8	8	4	..	..	..	33	1.57
Elec. Engr.	3	1	1	4	6	2	7	3	..	1	..	27	1.71
Fin. & Ins.	..	..	..	..	1	..	2	..	..	..	..	3	1.65
For. Lang.	..	..	..	..	..	..	1	..	..	..	..	1	2.34
Forestry	..	..	..	..	1	..	..	..	..	..	..	1	1.40
Fruit Crops	1	..	..	..	..	..	..	..	..	..	..	1	....
Indus. Engr.	..	..	1	..	1	..	..	1	..	..	..	3	1.43
Inter. Des.	..	..	..	..	1	1	2	..	..	..	..	4	1.84
Journalism	..	..	..	..	..	1	..	..	..	..	..	1	1.83
Land. Arch.	..	..	1	..	..	..	..	..	..	..	..	1	0.44

TABLE 39 (continued)

Major field	No grades*	0.00#	0.00 0.49	0.50 0.99	1.00 1.49	1.50 1.99	2.00 2.49	2.50 2.99	3.00 3.49	3.50 3.99	4.00	Total	Mean
Management	..	..	1	1	2	..	..	..	..	..	..	4	0.88
Marketing	..	..	..	..	..	..	1	1	1	..	..	3	2.36
Mathematics	..	..	..	..	1	..	..	2	1	..	..	4	2.55
Mech. Engr.	1	..	1	2	1	3	1	1	..	..	..	10	1.49
Music	..	1	1	..	1	2	..	..	..	..	..	4	1.17
Nursing	..	1	2	1	1	1	1	..	1	..	..	7	1.39
Pharmacy	1	..	2	..	..	2	3	..	..	..	..	8	1.56
Philosophy	..	..	..	..	1	..	..	..	..	..	..	1	1.05
Phys. Ther.	1	..	..	..	..	..	..	..	..	..	..	1	....
Physics	..	..	..	..	..	1	..	..	..	..	..	1	1.66
Pol. Sci.	1	..	..	..	..	..	..	..	..	..	..	1	....
Pre-dental	..	..	..	..	3	2	1	1	1	..	..	8	1.83
Pre-law	2	1	2	3	1	5	5	..	..	..	..	18	1.46
Pre-medical	3	1	3	3	2	9	9	2	..	..	..	31	1.65
Pre-vet. med.	2	..	..	..	1	1	1	1	..	..	..	6	1.85
Psychology	..	1	1	..	1	..	2	1	..	..	..	5	1.62
Sociology	1	..	..	1	..	1	1	1	..	1	..	6	2.24
Speech	..	..	..	..	1	..	..	..	..	..	..	1	1.00
None stated	7	5	8	4	6	15	6	4	2	..	1	53	1.48
Total	41	19	38	45	62	77	74	31	6	2	1	377	1.54

* Cases in this column represent students who did not earn any final grades before leaving the University.

Cases in this column are also included in the adjacent column to the right.

TABLE 40

GRADE-POINT AVERAGES AFTER REENTRY: COMPARISON OF STUDENTS COUNSELED (PRE-DROPOUT) IN OFFICE OF STUDENT AFFAIRS WITH TOTAL GROUP

Grade-point average	Counseled students*	Total group
4.00	..	1
3.50 - 3.99	1	2
3.00 - 3.49	..	6
2.50 - 2.99	2	31
2.00 - 2.49	3	74
1.50 - 1.99	3	77
1.00 - 1.49	2	62
0.50 - 0.99	2	45
0.00 - 0.49	1	38
0.00#	1	19
No grades°	1	41
Total	15	377
Mean	1.76	1.54

* All men; there were no reports of counseling for women.

# Cases in this row are also included in the row immediately above.

° Cases in this row represent students who did not earn any final grades before leaving the University.

TABLE 41

PRE-DROPOUT GRADE-POINT AVERAGES: CLINIC USERS COMPARED WITH TOTAL GROUP

Grade-point average	Clinic Users								Total group
	Men				Women				
	Mental health	Psy-chiat.	Psy-chol.	Read-ing	Mental health	Psy-chiat.	Psy-chol.	Read-ing	
4.00	..	..	..	..	1	..	..	..	1
3.50 - 3.99	..	..	..	..	..	..	..	..	0
3.00 - 3.49	..	..	..	..	..	..	..	..	1
2.50 - 2.99	..	1	..	..	..	..	..	..	2
2.00 - 2.49	..	..	..	2	1	1	..	..	11
1.50 - 1.99	..	..	1	2	..	..	..	..	24
1.00 - 1.49	1	..	3	7	..	..	3	..	103
0.50 - 0.99	..	1	3	12	..	..	..	..	91
0.00 - 0.49	..	..	2	5	..	..	..	..	61
0.00*	..	..	..	1	..	..	..	..	16
No grades#	2	3	..	5	..	..	..	1	83
Total	3	5	9	33	2	1	3	1	377
Mean	1.07	1.75	0.86	0.95	3.00	2.00	1.29	0	0.96

* Cases in this row are also included in the row immediately above.

Cases in this row represent students who left the University before earning any final grades.

group. It may be assumed that these students would not have been as successful as they were if they had not visited the clinic. This study is not intended to evaluate the effectiveness of the various clinics, but for purposes of developing a method of predicting success it would be desirable to determine how great an impetus toward success can be derived from the use of these various clinics.

Table 42 shows a widening of the differences between averages for clinic users and the total group. The group that had formerly made use of the Reading Clinic was successful in averaging higher than the total returnees, though the difference was not statistically significant. Perhaps the benefit they had derived from their clinical work before dropping out was not realized in time to help them before leaving initially. The averages for users of other clinics, while arithmetically larger (generally) than the average of the total group, are representative of such small groups as to render their differences insignificant.

The relationship of illness to achievement is involved in Tables 43 and 44. These tables are parallel to the ones which concerned out-patient care at the Infirmary (Tables 25 and 26). The results shown in the tables are opposite from those expected. In general, one thinks of illness serious enough to require confinement as quite detrimental to academic success. However, the predropout achievement

TABLE 42

GRADE-POINT AVERAGES AFTER REENTRY: CLINIC USERS (PRE-DROPOUT) COMPARED WITH TOTAL GROUP

Grade-point average	Clinic users - men					Clinic users - women				
	Mental health	Psy-chiat.	Psy-chol.	Read-ing	Total group	Mental health	Psy-chiat.	Psy-chol.	Read-ing	Total group
4.00	..	..	..	..	..	..	..	..	..	1
3.50 - 3.99	..	1	..	..	1	..	..	..	..	1
3.00 - 3.49	..	..	..	1	4	1	..	..	..	2
2.50 - 2.99	..	..	1	1	24	..	..	1	..	7
2.00 - 2.49	..	1	4	10	62	..	..	2	..	12
1.50 - 1.99	2	..	1	6	64	1	1	..	..	13
1.00 - 1.49	..	..	..	7	49	..	..	..	..	13
0.50 - 0.99	1	2	2	4	34	..	..	..	..	11
0.00 - 0.49	..	1	..	1	27	..	..	..	..	11
0.00*	..	..	..	..	15	..	..	..	..	4
No grades#	..	..	1	3	29	..	..	..	1	12
Total	3	5	9	33	294	2	1	3	1	83
Mean	1.24	1.53	1.85	1.65	1.55	2.60	1.80	2.25	0	1.49

* Cases in this row are also included in the row immediately above.

Cases in this row represent students who left the University before earning any final grades.

TABLE 43

PRE-DROPOUT GRADE-POINT AVERAGES, BY USE OF INFIRMARY AS IN-PATIENTS

Grade-point average	Men			Women			Total		
	In-patients	Non-patients	Total group	In-patients	Non-patients	Total group	In-patients	Non-patients	Total group
4.00	..	..	..	1	..	1	1	..	1
3.50 - 3.99	..	..	..	..	..	..	0	0	0
3.00 - 3.49	1	..	1	..	..	..	1	..	1
2.50 - 2.99	..	2	2	..	..	..	..	2	2
2.00 - 2.49	3	5	8	3	..	3	6	5	11
1.50 - 1.99	..	20	20	4	..	4	4	20	24
1.00 - 1.49	13	73	86	7	10	17	20	83	103
0.50 - 0.99	13	62	75	5	11	16	18	73	91
0.00 - 0.49	5	40	45	2	14	16	7	54	61
0.00*	..	12	12	1	3	4	1	15	16
No grades#	12	45	57	7	19	26	19	64	83
Total	47	247	294	29	54	83	76	301	377
Mean	1.01	0.95	0.96	1.33	0.70	0.94	1.14	0.91	0.96

* Cases in this row are also included in the row immediately above.

# Cases in this row represent students who left the University before earning any final grades.

of the students who were in-patients of the Infirmary was generally better than the achievement of those who were not. It seems that any relationship between confinement before dropout and achievement after reentry is ill-defined by Table 44. If any important relationships exist, they are not apparent. Judging from Tables 25, 26, 43, and 44, there would be little value in trying to predict later success of returning dropouts by reference to Infirmary records of former illnesses.

Students who were employed during the freshman year tended to have better grades after reentry. This fact is shown in Table 45. It was found, however, that the empirical difference is not of such significance to justify prediction of success on the simple fact that an individual held a job while a freshman. The main problem in interpreting this finding is the same one present in many of the results discussed already: the number of cases in the superior group is too small to attach great significance to the findings.

Table 46 shows a distribution of returning dropouts who had been employed as freshmen, by number of months worked. The small number of cases does not permit conclusions.

Students who were subjected to disciplinary action are compared with the total group of returnees in $T_a$bles 47 and 48. Table 47 is concerned with the period before dropout, while Table 48 shows the record of achievement for the same students following reentry.

TABLE 44

GRADE-POINT AVERAGES AFTER REENTRY, BY USE OF INFIRMARY AS IN-PATIENTS (PRE-DROPOUT)

Grade-point average	Men			Women			Total		
	In-patients	Non-patients	Total group	In-patients	Non-patients	Total group	In-patients	Non-patients	Total group
4.00	..	..	..	..	1	1	..	1	1
3.50 - 3.99	..	1	1	..	1	1	..	2	2
3.00 - 3.49	1	3	4	2	..	2	3	3	6
2.50 - 2.99	2	22	24	4	3	7	6	25	31
2.00 - 2.49	10	52	62	2	10	12	12	62	74
1.50 - 1.99	9	55	64	7	6	13	16	61	77
1.00 - 1.49	9	40	49	1	12	13	10	52	62
0.50 - 0.99	9	25	34	4	7	11	13	32	45
0.00 - 0.49	2	25	27	5	6	11	7	31	38
0.00*	1	14	15	3	1	4	4	15	19
No grades#	5	24	29	4	8	12	9	32	41
Total	47	247	294	29	54	83	76	301	377
Mean	1.49	1.57	1.55	1.55	1.46	1.49	1.51	1.55	1.54

* Cases in this row are also included in the row immediately above.

# Cases in this row represent students who left the University before earning any final grades.

TABLE 45

GRADE-POINT AVERAGES AFTER REENTRY: COMPARISON OF PRE-DROPOUT EMPLOYED STUDENTS WITH TOTAL GROUP

Grade-point averages	Men		Women		Total	
	Employed	Total group	Employed	Total group	Employed	Total group
4.00	..	..	..	1	..	1
3.50 - 3.99	..	1	..	1	..	2
3.00 - 3.49	..	4	1	2	1	6
2.50 - 2.99	2	24	1	7	3	31
2.00 - 2.49	2	62	2	12	4	74
1.50 - 1.99	..	64	..	13	..	77
1.00 - 1.49	3	49	..	13	3	62
0.50 - 0.99	..	34	..	11	..	45
0.00 - 0.49	1	27	..	11	1	38
*0.00	1	15	..	4	1	19
#No grades	..	29	..	12	..	41
Total	8	294	4	83	12	377
Mean	1.67	1.55	2.63	1.49	1.99	1.54

* Cases in this row are also included in the row immediately above.

# Cases in this row represent students who left the University before earning any final grades.

TABLE 46

GRADE-POINT AVERAGES AFTER REENTRY, BY NUMBER OF MONTHS EMPLOYED WHILE ENROLLED (PRE-DROPOUT)

Grade-point average	?	2 mos.	3 mos.	4 mos.	5 mos.	7 mos.	8 mos.	Total
4.00	..	..	..	..	..	..	..	0
3.50 - 3.99	..	..	..	..	..	..	..	0
3.00 - 3.49	..	..	1	..	..	..	..	1
2.50 - 2.99	1	1	..	..	1	..	..	3
2.00 - 2.49	2	..	..	..	1	1	..	4
1.50 - 1.99	..	..	..	..	..	..	..	0
1.00 - 1.49	..	..	1	1	..	..	1	3
0.50 - 0.99	..	..	..	..	..	..	..	0
0.00 - 0.49	..	..	1	..	..	..	..	1
0.00*	..	..	1	..	..	..	..	1
No grades	..	..	..	..	..	..	..	0
Total	3	1	3	1	2	1	1	12
Mean	2.33	2.53	1.48	1.40	2.55	2.35	1.07	1.99

* Cases in this row are also included in the row immediately above.

Cases in this row represent students who left the University before earning any final grades.

The students who were involved in disciplinary action tended to be more successful than the others during both periods under discussion, although the only significant difference statistically is between averages earned after reentry by disciplined students as compared with the total group of men. In most cases, the students were called to task for behavior which tended to interfere with opportunities for other students to learn (shooting firecrackers in the residence halls, vandalism, rioting, etc.). The data presented in Tables 47 and 48 seem to indicate that these students did not suffer as much from their own unruliness as did those around them. For purposes of prediction of success, one may at least observe that involvement in disciplinary action during freshman attendance does not indicate that the student will be unsuccessful upon reentry.

Table 49 shows a distribution of pre-dropout grade-point averages by type of initial termination. Although a few of the dropouts had better than "C" averages during their freshman work, the great majority were in serious academic difficulty. Even the students who left of their own volition were not maintaining averages high enough to save them from academic suspension, with few exceptions. Thus, the major portion of the withdrawing students were just one step ahead of the University in terminating their attendance.

Students who were suspended for one semester had lower average

TABLE 47

PRE-DROPOUT GRADE-POINT AVERAGES: STUDENTS INVOLVED IN DISCIPLINARY ACTION COMPARED WITH TOTAL GROUP

Grade-point average	Men		Women		Total	
	Disci-plined	Total group	Disci-plined	Total group	Disci-plined	Total group
4.00	..	..	..	1	..	1
3.50 - 3.99	..	..	..	..	..	0
3.00 - 3.49	..	1	..	..	..	1
2.50 - 2.99	2	2	..	..	2	2
2.00 - 2.49	1	8	..	3	1	11
1.50 - 1.99	2	20	1	4	3	24
1.00 - 1.49	8	86	1	17	9	103
0.50 - 0.99	3	75	..	16	3	91
0.00 - 0.49	..	45	..	16	..	61
0.00*	..	12	..	4	..	16
No grades#	4	57	..	26	4	83
Total	20	294	2	83	22	377
Mean	1.40	0.96	1.45	0.94	1.41	0.96

* Cases in this row are also included in the row immediately above.

# Cases in this row represent students who left the University before earning any final grades.

TABLE 48

GRADE-POINT AVERAGES AFTER REENTRY: STUDENTS INVOLVED IN DISCIPLINARY ACTION (PRE-DROPOUT) COMPARED WITH TOTAL GROUP

Grade-point average	Disciplined students compared with total group					
	Men		Women		Total	
	Disci-plined	Total group	Disci-plined	Total group	Disci-plined	Total group
4.00	..	..	..	1	..	1
3.50 - 3.99	1	1	..	1	1	2
3.00 - 3.49	..	4	..	2	..	6
2.50 - 2.99	3	24	..	7	3	31
2.00 - 2.49	5	62	..	12	5	74
1.50 - 1.99	5	64	1	13	6	77
1.00 - 1.49	1	49	..	13	1	62
0.50 - 0.99	1	34	..	11	1	45
0.00 - 0.49	1	27	1	11	2	38
0.00*	1	15	1	4	2	19
No grades#	3	29	..	12	3	41
Total	20	294	2	83	22	377
Mean	2.00**	1.55**	0.96	1.49	1.89	1.54

* Cases in this row are also included in the row immediately above.

# Cases in this row represent students who left the University before earning any final grades.

** Differences significant at .05 level of confidence.

TABLE 49

PRE-DROPOUT GRADE-POINT AVERAGES, BY TYPE OF INITIAL TERMINATION

Pre-dropout GPA	Type of initial termination										Total
	Men					Women					
	D	S	W	1	Tot.	D	S	W	1	Tot.	
4.00	.	.	.	.	..	.	.	1	.	1	1
3.50 - 3.99	.	.	.	.	..	.	.	.	.	.	0
3.00 - 3.49	.	.	1	.	1	.	.	.	.	.	1
2.50 - 2.99	1	.	1	.	2	.	.	.	.	.	2
2.00 - 2.49	1	.	5	2	8	.	.	3	.	3	11
1.50 - 1.99	1	2	12	5	20	.	.	2	2	4	24
1.00 - 1.49	.	31	23	32	86	.	7	7	3	17	103
0.50 - 0.99	.	11	11	53	75	.	.	5	11	16	91
0.00 - 0.49	.	..	4	41	45	.	.	.	16	16	61
0.00*	.	..	4	8	12	.	.	.	4	4	16
No grades#	.	..	55	2	57	.	.	26	.	26	83
Total	3	44	112	135	294	0	7	44	32	83	377
Mean	2.26	1.14°	1.27@	0.74°	0.96	-	1.35	1.44	0.57	0.94	0.96

* Cases in this row are also included in the row immediately above.

Cases in this row represent students who left the University before earning any final grades.

° Difference significant at .001 level of confidence.

@ Difference significant at .001 level of confidence.

Key to abbreviations and symbols:
D - Suspended from the University for disciplinary reasons.
S - Suspended for academic reasons, not eligible for readmission.
W - Withdrew from the University.
1 - Suspended for one semester for academic reasons.

grades than did the students who were suspended without promise of future admission, although the differences for women were not statistically significant. This condition exists because of the policy which differentiates between "permanent" suspension and suspension for one semester. The students who were suspended for one semester, in general, failed to pass more than half their work in the semester. Most of the students who were suspended "permanently" were first placed on probation for not achieving an average of 1.00 (D) in their first semester of attendance, and were then suspended for failing to achieve a better average during their second semester. It was possible for a student to be suspended "permanently" without failing more than two courses. However, a student could fail every course taken in his first semester, and he would be automatically eligible for readmission after one semester's interruption. The implied inequity of these policies were mitigated by the University's petition system which enabled suspended students to regain admission, in many cases after having been suspended "permanently."

Turning to Table 50, one is immediately struck by the patterns of post-dropout achievement of students who had initially dropped out for various reasons. Although the differences are relatively slight, the most successful group after reentry are those who were suspended for disciplinary reasons, with the second most successful being those

TABLE 50

GRADE-POINT AVERAGES AFTER REENTRY, BY TYPE OF INITIAL TERMINATION

GPA after reentry	Men				Women			Total all types
	Volun. withdl.	Acad.susp. 1 sem.	Acad.susp. "permt."	Dis-cipy.	Volun. withdl.	Acad.susp. 1 sem.	Acad.susp. "permt."	
4.00	..	..	..	..	..	1	..	1
3.50 - 3.99	..	..	..	1	1	..	..	2
3.00 - 3.49	2	2	..	..	2	..	..	6
2.50 - 2.99	6	11	6	1	1	4	2	31
2.00 - 2.49	20	27	14	1	6	2	4	74
1.50 - 1.99	26	26	12	..	7	5	1	77
1.00 - 1.49	16	29	4	..	7	6	..	62
0.50 - 0.99	14	19	1	..	5	6	..	45
0.00 - 0.49	14	11	2	..	8	3	..	38
0.00*	9	6	..	..	4	..	..	19
No grades#	14	10	5	..	7	5	..	41
Total	112	135**	44**	3	44	32	7	377

* Cases in this row are also included in the row immediately above.

# Cases in this row represent students who left the University before earning any final grades.

** Difference significant at .01 level of confidence.

who were suspended "permanently" at their first termination. The next most successful are those who were suspended for one semester, with the least successful being those who had originally withdrawn voluntarily. These relationships, while not conclusive, should at least prevent one from assuming that a student who was suspended formerly would be a less able student than one who had voluntarily withdrawn from the University. No doubt, the major factor tending to cause the group of reinstated students to succeed was the selective process of judgment which was exercised when the student petitioned for readmission. Their success is a credit to the wisdom of the committee which approved their readmission.

Table 51 compares the achievement of students who had received counseling from the University while between enrollments with those who did not. For the most part, these counseling sessions were connected with petitions which students were submitting for reinstatement. These petitions could have been from students desiring immediate readmission after having been suspended for one semester, or from students who had been suspended "permanently." It is apparent that the students who received counseling while dropouts tended to surpass their fellows after reentry.

Tables 52, 53, 54, and 55 primarily concern those students who attended some college or university while away from the University of

TABLE 51

GRADE-POINT AVERAGES AFTER REENTRY: STUDENTS COUNSELED WHILE AWAY, COMPARED WITH STUDENTS NOT COUNSELED

Grade-point average	Men		Women		Total	
	Coun-seled	Non-counsd.	Coun-seled	Non-counsd.	Coun-seled	Non-counsd.
4.00	..	..	..	1	..	1
3.50 - 3.99	1	..	1	..	2	..
3.00 - 3.49	..	4	..	2	..	6
2.50 - 2.99	9	15	2	5	11	20
2.00 - 2.49	21	41	4	8	25	49
1.50 - 1.99	20	44	2	11	22	55
1.00 - 1.49	13	36	1	12	14	48
0.50 - 0.99	5	29	2	9	7	38
0.00 - 0.49	3	24	..	11	3	35
0.00*	1	14	..	4	1	18
No grades#	7	22	3	9	10	31
Total	79	215	15	68	84	283
Mean	1.80**	1.46**	1.99	1.39	1.83	1.45

* Cases in this row are also included in the row immediately above.

# Cases in this row represent students who left the University before earning any final grades.

** Difference significant at .01 level of confidence.

Florida. Relatively few of these students reentered the University with less than a 2.00 (C) average at the other colleges, for two main reasons: First, the University will usually refuse to readmit a student who has failed elsewhere to maintain a "C" average, particularly if the former record of achievement at the University has also been below average. Second, students who have been unsuccessful academically at two colleges tend to terminate their college work rather than to apply for readmission to either college.

Table 52 indicates that there is a significant relationship between the grades earned at the University during the period prior to first termination and grades earned at other colleges. The correlation coefficients of .350 (men), .438 (women), and .332 (total) are significant at the .01 level of confidence. This correlation does not mean that the students would probably earn about the same grades at the other colleges as they earned at the University of Florida. The proper interpretation is that these students could be expected to vary in their achievement at the other college in about the same way their achievement varied at the University.

It is probably of interest to note that a majority of the colleges attended by these students were junior colleges, rather than four-year colleges. Out of eighty-one students attending other colleges, fifty-nine (82 percent) attended junior colleges. In Florida,

TABLE 52

GRADE-POINT AVERAGES EARNED AT OTHER INSTITUTIONS, BY PRE-DROPOUT GRADE-POINT AVERAGE EARNED AT UNIVERSITY OF FLORIDA

GPA at other instit.	No grades*	Grade-point average earned at U. of Fla. before dropout										Tot.	Mean
		0.00#	0.00 0.49	0.50 0.99	1.00 1.49	1.50 1.99	2.00 2.49	2.50 2.99	3.00 3.49	3.50 3.99	4.00		
4.00	.	.	.	.	.	.	.	.	.	.	.	..	....
3.50 - 3.99	.	.	.	.	.	1	.	.	.	.	.	1	1.56
3.00 - 3.49	3	.	1	1	6	1	1	.	.	.	.	13	1.28
2.50 - 2.99	1	1	3	4	9	3	1	.	1	.	.	22	1.19
2.00 - 2.49	8	.	2	14	11	4	1	.	.	.	.	40	1.02
1.50 - 1.99	3	1	2	1	..	1	.	.	.	.	.	7	0.65
1.00 - 1.49	.	.	2	1	..	.	.	.	.	.	.	3	0.32
0.50 - 0.99	.	.	.	.	..	.	.	.	.	.	.	..	....
0.00 - 0.49	.	.	.	1	..	.	.	.	.	.	.	1	0.64
0.00**	.	.	.	1	..	.	.	.	.	.	.	1	0.64
No grades##	68	14	51	69	77	14	8	2	.	.	1	290	0.92
Total	83	16	61	91	103	24	11	2	1	0	1	377	0.97
Mean	2.29	2.35	2.26	2.24	2.62	2.51	2.53	0	2.85	0	0	2.43	0

Coefficients of correlation: Total +.332, men .350 and women .438, all significant at .01 level of confidence.

Note: 59 of these people, or 82 %, attended a junior college.

# Cases in this column are also included in the column adjacent to the right.

* Cases in this column represent students who left the University before earning any final grades.

** Cases in this row are also included in the row immediatly above.

## Cases in this row represent students who left the University before earning any final grades.

there are about thirty public community junior colleges, located convenient to the population. For the most part, these junior colleges do not require a minimum average in previous college work for the admission of transfer students. Since most four-year colleges specify that a "C" average is required for transfer admission, it is easy to understand why the majority of these students attended junior colleges rather than four-year colleges during their period of absence from the University.

Table 53 shows the post-dropout achievement at the University for those who attended another college while away from the University as compared with the averages for those who did not attend another college. Although only the differences for men were statistically significant, it is apparent that the students who went to another college for a time tended to do better work after returning than those who did not. In fact, the group who attended college elsewhere, if taken as a whole, had a mean grade-point average of over 2.00. This finding could hold considerable significance to University personnel who have occasion to advise students regarding what activities will tend to improve their chances of success after reentry.

Table 54 demonstrates the close relationship which was found to exist between achievement at a college other than the University of Florida and achievement at the University following reentry. It will

TABLE 53

GRADE-POINT AVERAGES AFTER REENTRY, COMPARISON OF STUDENTS WHO DID AND DID NOT ATTEND COLLEGE WHILE AWAY

Grade-point average	Men		Women		Total	
	Attended other college	No college work elsewhere	Attended other college	No college work elsewhere	Attended other college	No college work elsewhere
4.00	..	..	..	1	..	1
3.50 - 3.99	..	1	1	..	1	1
3.00 - 3.49	2	2	..	2	2	4
2.50 - 2.99	6	18	4	3	10	21
2.00 - 2.49	20	42	1	11	21	53
1.50 - 1.99	7	57	2	11	9	68
1.00 - 1.49	4	45	..	13	4	58
0.50 - 0.99	4	30	..	11	4	41
0.00 - 0.49	1	26	..	11	1	37
0.00*	1	14	..	4	1	18
No grades#	5	24	1	11	6	35
Total	50	259	9	78	59	337
Mean	1.92**	1.48**	2.52	1.36	2.01	1.45

* Cases in this row are also included in the row immediately above.

Cases in this row represent students who left the University before earning any final grades.

** Difference significant at .01 level of confidence.

TABLE 54

GRADE-POINT AVERAGES AFTER REENTRY, BY GRADE-POINT AVERAGES EARNED AT OTHER INSTITUTIONS

GPA at other instit.	No grades*	Grade-point average earned at U. of Fla. before dropout											
		0.00#	0.00 0.49	0.50 0.99	1.00 1.49	1.50 1.99	2.00 2.49	2.50 2.99	3.00 3.49	3.50 3.99	4.00	Tot.	Mean
4.00	1	.	.	.	.	.	.	.	.	.	.	1	....
3.50 - 3.99	1	.	.	.	.	.	.	1	.	.	.	2	2.96
3.00 - 3.49	3	.	.	.	.	.	.	3	.	.	.	6	2.83
2.50 - 2.99	15	.	.	.	.	.	7	3	5	1	.	31	2.72
2.00 - 2.49	40	1	1	.	1	1	16	11	4	.	.	74	2.38
1.50 - 1.99	63	.	.	.	.	.	9	2	3	.	.	77	2.51
1.00 - 1.49	55	.	.	.	.	4	2	.	1	.	.	62	2.11
0.50 - 0.99	41	.	.	.	1	1	1	1	.	.	.	45	1.91
0.00 - 0.49	36	.	.	.	1	1	.	.	.	.	.	38	1.47
0.00##	18	.	.	.	.	1	.	.	.	.	.	19	1.93
No grades**	35	.	.	.	.	.	5	1	.	.	.	41	2.29
Total	290	1	1	0	3	7	40	22	13	1	0	377	2.43
Mean	1.38	2.00	2.00	0	1.00	1.17	2.06	2.34	2.22	2.82	0	2.01	0

Coefficients of correlation: Total +.528, men .503 and women .307, all significant at .01 level of confidence.

* Cases in this column represent students who left the University before earning any final grades.

# Cases in this column are also included in the column adjacent to the right.

** Cases in this row represent students who left the University before earning any final grades.

## Cases in this row are also included in the row immediately above.

be noted that the coefficients of correlation between the two variables are .503 (men), .307 (women) and .528 (both sexes combined), at the .01 level of confidence. These cases are only eighty-one in number, but the correlation is high enough to offer considerable weight to the idea that a dropout's achievement at another college can help in predicting success after reentry. It should be noted that the mean grade-point average following reentry is lower for these students than their averages were at the other colleges. The difference amounts to almost five-tenths of a grade point on the average. Thus, a student needed an average of roughly 2.5 (C+ or B-) in his work at a college elsewhere in order to have expectation of maintaining a 2.0 (C) average after reentering the University. Of course, this statement is an over-simplification of the relationship, since no statistical tests, other than a test of significance of the correlation, have been conducted. A more thorough study of the benefits derived from attendance at junior colleges or other colleges while a dropout from the University would be very helpful.

Tables 55 and 56 present the pattern of attendance at other colleges and help to show the relationship between length of attendance elsewhere and subsequent achievement at the University. Coefficients of correlation were computed separately for men and for women on the two variables: grade-point average after reentry, and number of

TABLE 55

GRADE-POINT AVERAGES AFTER REENTRY, BY NUMBER OF SEMESTERS ATTENDED AT OTHER COLLEGES - MEN

Grade-point	Number of semesters attended at other colleges															
average	None	0.5	1.0	1.5	2.0	2.5	2.7	3.0	3.5	4.0	4.5	5.0	5.5	6.0	7.5	Tot.
4.00	..	.	.	.	.	.	.	.	.	.	.	.	.	.	.	..
3.50 - 3.99	1	.	.	.	.	.	.	.	.	.	.	.	.	.	.	1
3.00 - 3.49	1	.	.	.	.	.	.	.	.	2	.	1	.	.	.	4
2.50 - 2.99	13	1	.	1	2	1	.	.	.	2	.	2	1	.	1	24
2.00 - 2.49	32	6	5	1	4	1	.	3	1	3	3	1	.	1	1	62
1.50 - 1.99	52	3	2	.	.	.	.	1	1	1	2	2	.	.	.	64
1.00 - 1.49	43	1	.	.	.	.	.	.	.	3	.	1	1	.	.	49
0.50 - 0.99	30	2	1	.	.	.	.	.	.	.	1	.	.	.	.	34
0.00 - 0.49	25	1	.	.	1	.	.	.	.	.	.	.	.	.	.	27
0.00*	14	.	.	.	1	.	.	.	.	.	.	.	.	.	.	15
No grades#	24	.	1	.	1	.	.	.	.	.	.	1	.	2	.	29
Total	221	14	9	2	8	2	0	4	2	11	6	8	2	3	2	294
Mean	1.40	1.76	1.91	2.51	1.98	2.39	0	2.09	1.81	2.19	1.80	2.12	1.97	2.11	2.29	1.55

* Cases in this row are also included in the row immediately above.

Cases in this row represent student who left the University before earning any final grades.

TABLE 56

GRADE-POINT AVERAGES AFTER REENTRY, BY NUMBER OF SEMESTERS ATTENDED AT OTHER COLLEGES - WOMEN

Grade-point average	Number of semesters attended at other colleges None	0.5	1.0	1.5	2.0	2.5	2.7	3.0	3.5	4.0	4.5	5.0	5.5	6.0	7.5	Tot.
4.00	1	.	.	.	.	.	.	.	.	.	.	.	.	.	.	1
3.50 - 3.99	.	.	.	.	.	.	.	.	1	.	.	.	.	.	.	1
3.00 - 3.49	2	.	.	.	.	.	.	.	.	.	.	.	.	.	.	2
2.50 - 2.99	2	.	1	.	.	.	1	.	.	1	2	.	.	.	.	7
2.00 - 2.49	9	2	.	.	1	.	.	.	.	.	.	.	.	.	.	12
1.50 - 1.99	10	1	.	.	.	.	.	1	1	.	.	.	.	.	.	13
1.00 - 1.49	12	.	1	.	.	.	.	.	.	.	.	.	.	.	.	13
0.50 - 0.99	11	.	.	.	.	.	.	.	.	.	.	.	.	.	.	11
0.00 - 0.49	11	.	.	.	.	.	.	.	.	.	.	.	.	.	.	11
0.00*	4	.	.	.	.	.	.	.	.	.	.	.	.	.	.	4
No grades	11	.	.	.	.	.	.	.	.	.	1	.	.	.	.	12
Total	69	3	2	0	1	0	1	1	2	1	3	0	0	0	0	83
Mean	1.31	2.09	1.91	0	2.00	0	2.88	1.69	2.76	2.55	2.66	0	0	0	0	1.49

* Cases in this row are also included in the row immediately above.

Cases in this row represent students who left the University before earning any final grades.

semesters attended at other colleges. The coefficient for men is +.303 and for women +.406, both significant at the .01 level of confidence. The data seem to indicate that students have better chances for success after reentry if they remain enrolled elsewhere for more than one semester.

Table 57 deals with the relation of military service during absence from the University with achievement after reentry. It is often suggested to unsuccessful students that they should enter military service in order to mature and "settle down," to "find themselves." This table shows that the students who entered military service while away did, in fact, receive better grades on the average than did the remainder of the returning dropouts. However, the number of men who were known to have entered military service was only seventeen. No statistical significance can be attached to the differences in mean grade-point averages for the two groups, in view of the small number of veterans reentering.

There were thirty-one students who were employed at either part-time or full-time jobs while away from the University. As shown in Table 58, the students who went to work while away were more successful in their academic work after reentry than were the returning dropouts as a whole. Although the size of the group who worked is relatively small, the difference in mean grade-point averages between

TABLE 57

GRADE-POINT AVERAGES AFTER REENTRY, COMPARISON OF STUDENTS (ALL MALE) WHO ENTERED MILITARY SERVICE WHILE AWAY WITH TOTAL GROUP

Grade-point average	Number of months served in military service											Total males
	?	6	7	12	24	36	40	45	47	48	Tot.	
4.00	.	.	.	.	.	.	.	.	.	.	..	..
3.50 - 3.99	.	.	.	.	.	.	.	.	.	.	..	1
3.00 - 3.49	.	.	.	.	1	.	.	.	.	.	1	4
2.50 - 2.99	1	.	.	.	.	.	1	.	.	.	2	24
2.00 - 2.49	1	.	.	.	1	1	.	.	.	.	3	62
1.50 - 1.99	1	2	.	1	.	.	.	.	.	1	5	64
1.00 - 1.49	.	.	.	.	.	.	.	.	1	.	1	49
0.50 - 0.99	.	1	1	.	.	.	.	1	.	.	3	34
0.00 - 0.49	.	.	.	.	.	.	.	.	.	.	..	27
0.00*	.	.	.	.	.	.	.	.	.	.	..	15
No grades#	.	.	.	.	.	.	.	.	.	.	2	29
Total	3	3	1	1	2	3	1	1	1	1	17	294
Mean	2.23	1.43	0.57	1.63	2.61	2.08	2.51	0.57	1.31	1.57	1.77	1.55

* Cases in this row are also included in the row immediately above.

Cases in this row represent students who left the University before earning any final grades.

TABLE 58

GRADE-POINT AVERAGES AFTER REENTRY, COMPARISON OF STUDENTS WHO WORKED WHILE AWAY WITH THE TOTAL GROUP

Grade-point average	Men			Women			Total		
	Part-time	Full-time	All men	Part-time	Full-time	All women	Part-time	Full-time	Total
4.00	..	..	..	..	..	1	..	..	1
3.50 - 3.99	..	..	1	..	..	1	..	..	2
3.00 - 3.49	..	..	4	..	..	2	..	..	6
2.50 - 2.99	2	3	24	..	3	7	2	6	31
2.00 - 2.49	3	8	62	..	2	12	3	10	74
1.50 - 1.99	1	4	64	..	1	13	1	5	77
1.00 - 1.49	..	3	49	..	..	13	..	3	62
0.50 - 0.99	..	1	34	..	..	11	..	1	45
0.00 - 0.49	..	..	27	..	..	11	..	..	38
0.00*	..	..	15	..	..	4	..	..	19
No grades#	..	..	29	..	..	12	..	..	41
Total	6	19	294	0	6	83	6	25	377
Mean	2.33	2.00**	1.55**	0	2.35	1.49	2.33	2.08	1.54

* Cases in this row are also included in the row immediately above.

# Cases in this row represent students who left the University before earning any final grades.

** Difference significant at .05 level of confidence.

full-time employed men and the total group of men is large enough to have some significance. It seems that advice to dropouts to "get a job" could, in many cases, be sound advice. If they return to the University after working for a while, they could be expected to achieve at a higher level than non-working students with similar problems in their educational background.

Table 59 shows the numbers of students who made use of various clinics of the University after reentry, and it also relates such clinical use to the academic success of the students. Unfortunately, the subgroups do not show any significant differences among their means; nor do they differ significantly from the total group. Therefore, the use of these clinics could not be said to have greatly influenced the success of the returning dropouts.

Tables 60 and 61 demonstrate the relative degrees of post-dropout success enjoyed by the various subgroups, classified according to reason for final termination and sex. The subgroup of men showing the highest grade-point average after reentry consisted of just one person, an Engineering Co-op student. The second highest group were the graduates. The third highest were those still enrolled at the University. Next came a subgroup of excluded students who failed to qualify for admission to the junior class after completing as much as eighty-six semester hours of college work. The next in order of excellence was a

TABLE 59

GRADE-POINT AVERAGES AFTER REENTRY, CLINIC USERS COMPARED WITH TOTAL GROUP

Grade-point average	Mental health	Psychiatric	Psychological	Reading	Total group
4.00	.	.	.	.	1
3.50 - 3.99	.	.	1	.	2
3.00 - 3.49	1	.	.	.	6
2.50 - 2.99	2	1	3	1	31
2.00 - 2.49	5	4	6	8	74
1.50 - 1.99	4	2	2	7	77
1.00 - 1.49	1	3	3	7	62
0.50 - 0.99	1	1	1	2	45
0.00 - 0.49	1	1	1	2	38
0.00*	1	1	.	1	19
No grades#	.	.	6	.	41
Total	15	12	23	27	377
Mean	1.92	1.66	1.97	1.60	1.54

* Cases in this row are also included in the row immediately above.

# Cases in this row represent students who left the University before earning any final grades.

TABLE 60

TYPE OF FINAL TERMINATION OR STATUS, BY GRADE-POINT AVERAGE AFTER REENTRY - MEN

Final termination or status (men)	Grade-point average after reentry											Tot.	Mean
	No grades*	0.00#	0.00 0.49	0.50 0.99	1.00 1.49	1.50 1.99	2.00 2.49	2.50 2.99	3.00 3.49	3.50 3.99	4.0		
W	22	2	2	1	3	11	8	3	1	.	.	51	1.77
N	..	1	2	1	3	9	9	1	1	.	.	26	1.75
C	..	.	.	.	.	1	2	1	.	.	.	4	2.14
G	..	.	.	.	.	.	17	7	1	.	.	25	2.44
S	7	12	23	32	41	38	6	.	.	.	.	147	1.09
X	..	..	..	..	..	..	.	1	.	.	.	1	2.53
1	..	..	..	..	2	..	.	.	.	.	.	2	1.20
4	..	..	..	..	..	1	2	.	.	.	.	3	2.01
6	..	..	..	..	..	..	1	1	.	.	.	2	2.25
D	..	..	..	..	..	1	.	.	.	.	.	1	1.62
E	..	..	..	..	..	3	17	10	1	1	.	32	2.39
Total	29	15	27	34	49	64	62	24	4	1	0	294	1.55

* Cases in this column represent students who did not earn any final grades before leaving the University.

Cases in this column are also included in the adjacent column to the right.

Differences significant at the .001 level, were found between the means of the following subgroups: G - N, G - W, G - S, E - W, E - N, E - S, S - W, and S - N.

Key to abbreviations and symbols: (see Table 31).

TABLE 61

TYPE OF FINAL TERMINATION OR STATUS, BY GRADE-POINT AVERAGE AFTER REENTRY - WOMEN

Final termination or status (women)	Grade-point average after reentry											Tot.	Mean
	No grades*	0.00#	0.00 0.49	0.50 0.99	1.00 1.49	1.50 1.99	2.00 2.49	2.50 2.99	3.00 3.49	3.50 3.99	4.0		
W	10	1	1	..	.	4	4	1	.	1	1	22	2.18
N	..	1	1	..	3	3	3	.	1	.	.	11	1.69
G	1	.	.	..	.	.	3	5	1	.	.	10	2.61
S	1	2	9	11	10	6	1	.	.	.	.	38	0.88
E	.	.	.	..	..	.	1	1	.	.	.	2	2.59
Total	12	4	11	11	13	13	12	7	2	1	1	83	1.49

* Cases in this column represent students who did not earn any final grades before leaving the University.

Cases in this column are also included in the adjacent column to the right.

Significant differences, at the level indicated, were found between the means of the following subgroups: at the .01 level, N - G, N - S; at the .001 level, S - W, S - G.

Key to abbreviations and symbols: (See Table 31).

subgroup of four men who transferred to other colleges. The remaining subgroup of men with averages better than 2.00 were three who were excluded from the University because they had attempted at least forty-eight semester hours and did not have overall "C" averages, considering their pre-dropout work as well as their subsequent work. The remaining subgroups of men--the ones who withdrew or left at the end of term for no explanation, those who were suspended for academic reasons, and the one person suspended for disciplinary reasons--these were all unsuccessful in reaching a "C" average after reentry. Of course, there were individuals in nearly all these subgroups who had satisfactory grades, but the subgroup average was the basis for these analyses. The differences which were statistically significant are indicated below the table.

Table 61 reveals a much simpler array of terminal conditions, for women. The ten graduates had the highest averages after reentry, but those who were still enrolled at the time of this study were closely behind. The remaining subgroup of withdrawn students complete the classifications of women returnees who could be deemed successful. The women who left for no explained reason after the end of term and those who were suspended because of their grades comprise the unsuccessful group of women. The statistically tested differences in means are indicated below the table.

CHAPTER VI

CONCLUSIONS AND RECOMMENDATIONS

The purpose of this study was to identify and evaluate certain factors associated with success which could be utilized in a university program for the readmission of formerly unsuccessful students. The population studied consisted of all regularly admitted and registered students who both (1) enrolled for their first college-level work as freshmen at the University of Florida in the autumn of 1959 or 1960, and (2) either were suspended (for any reason) from the University within the first calendar year following initial registration, or voluntarily withdrew (after the last date for dropping courses without receiving failing grades) within the first year. Only those students from this population who reentered the University prior to April, 1965, were selected for intensive study.

Data were gathered from various offices of the University in an attempt to identify as many factors associated with success as possible. The following types of data were ultimately selected for analysis:

1. Standardized test results:
    a. Florida Twelfth Grade Testing Program scores
    b. American Council on Education Psychological Examination, College Edition, scores
    c. School and College Ability Test scores
    d. Minnesota Multiphasic Personality Inventory scores.

2. Other academic data:
    a. University achievement
    b. Achievement at colleges other than the University of Florida
    c. Clinical and mental health services provided by the University
    d. Student plans and objectives

3. Non-intellective data:
    a. Extra-curricular activities
    b. Disciplinary actions
    c. Military and work experiences
    d. Physical health.

The University offices providing these data were the Offices of the Registrar, Dean of Student Affairs, University College, University Physician, University Examiner, University Placement, and Deans and Directors of eleven upper-division Colleges and Schools. All records pertaining to the group studied were carefully read and summarized for analysis.

There were 1,570 students who formed the population of dropouts for this study. Of this number, 377 were found to have reentered the University at some time prior to April, 1965. These 377 students were the ones chosen for intensive study.

Summary of the Findings

The dropout problem is one of great magnitude and one which shows no signs of diminishing. Attention was given in Chapter II to the confusion surrounding the reasons for student attrition. It was observed that colleges need to develop ways of reducing attrition through better selection and retention procedures. Many techniques have been developed for use in predicting success in college. The majority of studies concerned with predictors have concluded that the best single predictor of college success is the grade average in high school. Other predictive instruments also show promise and many are now used by colleges in various combinations which seem most appropriate to the officials of the several colleges. Continued research is needed in order to provide better predictors of success for admitted students.

In Chapter V the findings of the study were described in detail. These findings may be summarized as follows:

1. The first year dropout rate, as defined for this study, for the two freshman classes of the University of Florida--1959 and 1960--was 22.9 percent.

2. Low correlations (+.116 to +.178) existed between numbers of extra-curricular high-school activities and success of the returning dropouts.

3. Standardized ability and achievement tests showed higher correlations with University achievement for women than for men among the returning dropouts (see Table 10,Ch.V).

4. Correlations between test scores and freshman achievement were higher than those between test scores and achievement following reentry of the returning dropouts (see Table 10).

5. Correlations between MMPI results and academic success of the returning dropouts were very low (-.199 to +.203).

6. A moderate relationship (not significant) existed between

length of attendance prior to dropout and success of the students after they reentered.

7. No predictive value was identified from records concerning student health.

8. The type of initial termination offered no basis for prediction of later success.

9. Grade-Point averages prior to dropout were fair indicators ($r = +.325$ for men and $+.383$ for women) of averages earned after reentry for the group studied.

10. Approximately 18 percent of the returning dropouts were successful in reaching graduation or were still enrolled in good standing at the time of this study.

11. Scores on the Florida Twelfth Grade Testing Program offer no benefit to prediction of graduation for returning dropouts.

12. Grade-point averages for returning students in the multiplicity of major fields generally showed empirical improvement after reentry, although such improvement was not statistically significant.

13. No relationship was found between use of University clinics and University success.

14. Students involved in disciplinary action did not suffer reduction of their GPA's in relation to the rest of the returning dropouts.

15. Students who attended college elsewhere while "dropouts" at the University, tended to surpass those who did not, after reentry (difference only significant for men).

16. Grade-point averages earned after reentry tended to be about one-half a grade point lower, on the average, than grade-point averages earned at colleges other than the University of Florida.

17. The returning dropouts achieved better grades at the University in approximate direct proportion to length of

attendance at another college while away from the University.

18. Students who entered military service following initial dropout of the University received higher grades on the average after reentry than did the returning dropouts as a whole.

19. Students who obtained employment while "dropouts" were the most successful group after reentry of all the returnees, although their level of achievement was not significantly greater than students who had attended other colleges.

Implications

There are many implications which might be drawn from this study. Before coming to definite conclusions, however, it would be advisable for the reader to understand certain conditions which exist:

1. These data concern only one institution and students who registered in that institution at two consecutive, fall registrations--1959 and 1960.
2. Most of the data relate to only 377 students who have been designated "returning dropouts" for purposes of this study.
3. Some of the sources of data were not sufficient to justify total confidence that complete data were collected.
4. The data were collected with all the care possible by the researcher, but errors are certainly possible.

In brief, it seems that the following implications are warranted:

1. Students whose college attendance is interrupted for scholastic reasons may be expected to achieve at an improved level, on the average, after they reenter the University.

2. Dropouts who have entered military service, have had successful work experience, or have attended other colleges with good results may be expected to achieve better grades after reentry than dropouts who have not had these experiences.

3. Sufficient numbers of returning dropouts succeed to justify readmission of selected dropouts.

4. No objective measures were discovered that can be used exclusively to predict success of returning dropouts.

5. Non-objective judgments gained by counselors and admissions officers through interviews and other techniques should be given considerable weight in deciding readmission of students.

Perhaps the main implication to be drawn is that we still cannot be certain what factors determine the success and failure of students. In this study, evidence has been presented which seems to justify confidence in certain predictors of success for returning college dropouts. These have been enumerated in the summary of findings, above. However, none of these findings offers the final answer as to what factors cause students to succeed and what factors cause students to fail.

Additional Research Needed

There are many questions left unanswered by this study. Some of these questions are as follows:

1. What factors caused the 377 students in this study to return to the University? What factors prevented the remaining 957 dropouts from returning to the University?

2. What were the factors in the University "climate" which contributed to the initial termination of the dropouts, and the subsequent success or failure of the returnees?

3. What differences exist between dropouts as a group and returning dropouts after the passage of a considerable length of time, ten years, for example?

4. Compared with a random sample of students who did not interrupt their college work, what is the pattern of success of the returning dropouts, as evaluated on factors other than grades and graduation? Such factors might include annual salary, prestige of employment status, social level within community, etc.

These and other questions might well be answered by further research conducted at the University. There is also a need for additional research concerning return of dropouts on the regional and national levels. Several researchers have pointed out the need for specific studies dealing with the total college careers of a representative sample of students. Up until now, studies of returning dropouts have been almost entirely local in nature. As a result, no one seems to know exactly how serious the problem of real attrition is. We can only speculate from incomplete data that the net dropout rate is "so much." With the nation facing many demands, perhaps the very defense of our way of life, it hardly seems wise to ignore the apparent loss of human resources which our present state of research suggests. If we find that ways can be developed to reclaim dropouts from their disillusioned state and motivate them to resume their college work with ultimate success, it will be our duty to society to implement these approaches with all our strength.

APPENDIX

TABLE 62

MMPI HIGH-POINT SCALES, COMPARISON OF RETURNING DROPOUTS WITH TOTAL ENTRANTS (1959-61)*

MMPI scale	Men				Women				Total			
	Total entrants		Returning dropouts		Total entrants		Returning dropouts		Total entrants		Returning dropouts	
	N	%	N	%	N	%	N	%	N	%	N	%
1	88	1.8	4	1.4	16	0.6	0	0	104	1.4	4	1.1
2	325	6.6	18	6.5	115	4.6	4	4.9	440	5.9	22	6.1
3	397	8.1	16	5.8	280	11.3	12	14.8	677	9.2	28	7.8
4	848	17.3	54	19.4	478	19.2	13	16.1	1326	17.9	67	18.7
5	850	17.3	26	9.4	147	5.9	4	4.9	997	13.5	30	8.4
6	185	3.8	5	1.8	264	10.6	7	8.7	449	6.0	12	3.3
7	448	9.1	29	10.4	180	7.2	7	8.7	628	8.5	36	10.0
8	410	8.3	34	12.2	136	5.5	3	3.7	546	7.4	37	10.3
9	1214	24.7	88	31.7	684	27.5	27	33.3	1898	25.7	115	32.1
0	146	3.0	4	1.4	184	7.4	4	4.9	330	4.5	8	2.2
Total	4911	100.0	278#	100.0	2484	99.8	81#	100.0	7395	100.0	359#	100.0

* Includes some upper classmen admitted as transfer students.

# Does not include 18 persons (16 men and 2 women) who did not take the test.

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BIOGRAPHICAL SKETCH

William Louis Wharton was born July 6, 1931, at Parkersburg, West Virginia. He received his early education in Virginia, West Virginia, Oregon, and Florida. He graduated from Parkersburg High School in June, 1947, and enrolled that fall at Florida Christian College, in Tampa. He received the degree Bachelor of Science in June, 1950. That fall he began graduate study at the University of Florida, receiving a Master of Education degree in June, 1952.

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This dissertation was prepared under the direction of the chairman of the candidate's supervisory committee and has been approved by all members of that committee. It was submitted to the Dean of the College of Education and to the Graduate Council, and was approved as partial fulfillment of the requirements for the degree of Doctor of Education.

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